



TEST

"Practice Test (1B-Periods)





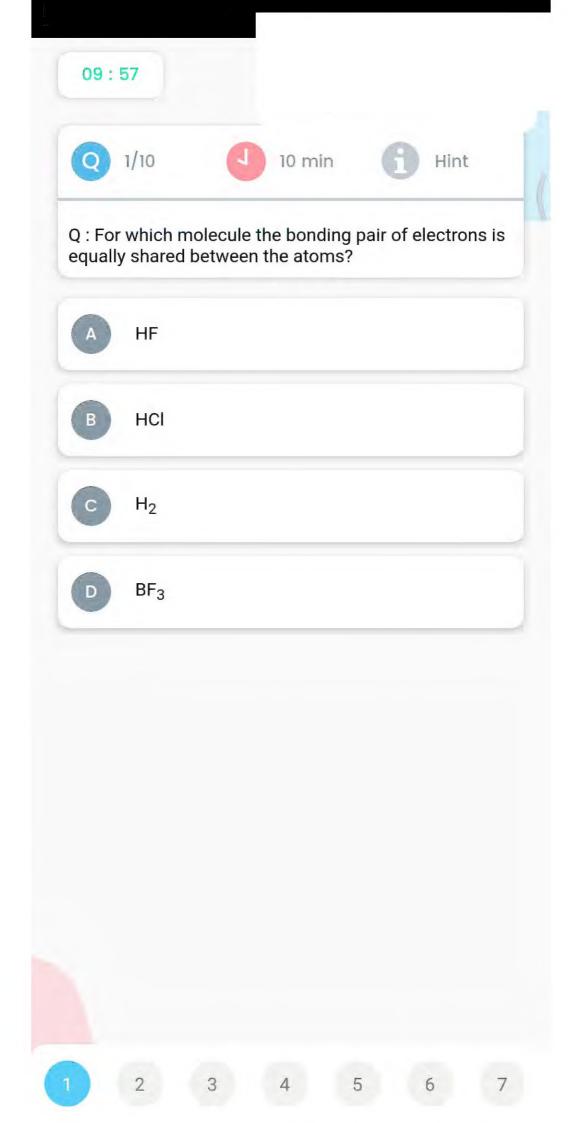


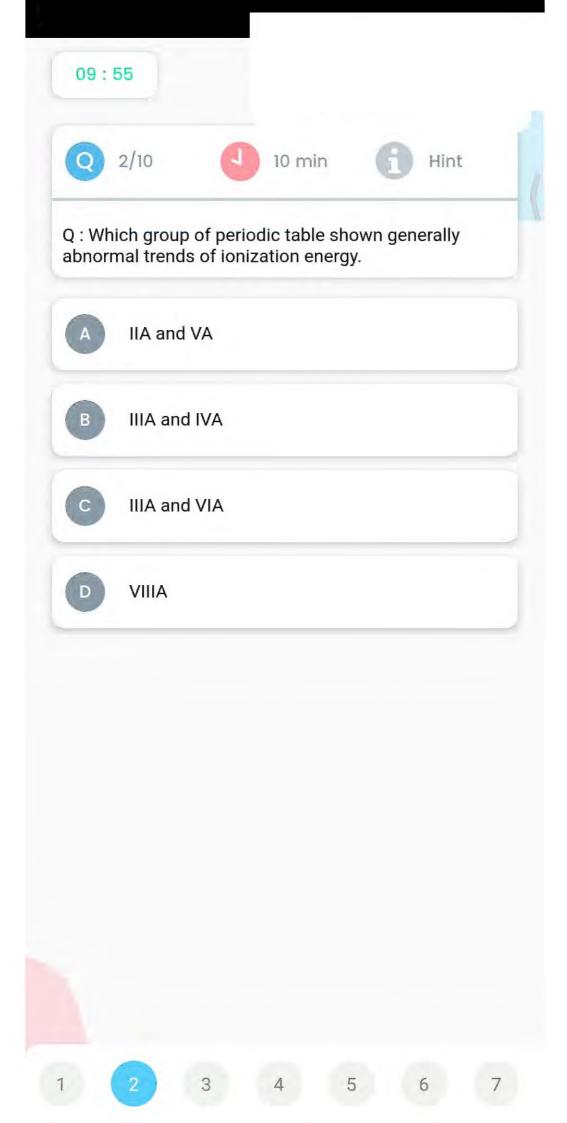
10 min

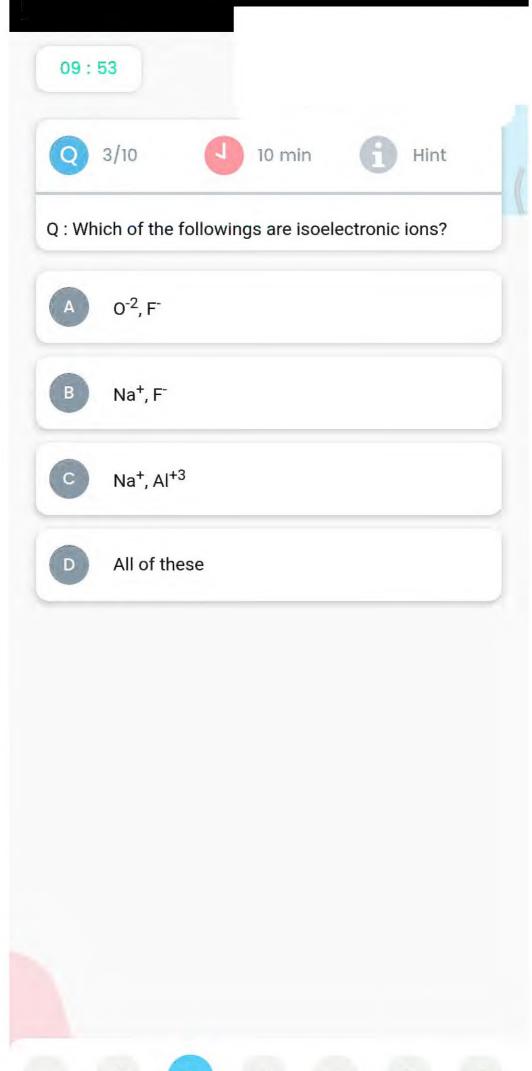
Topics

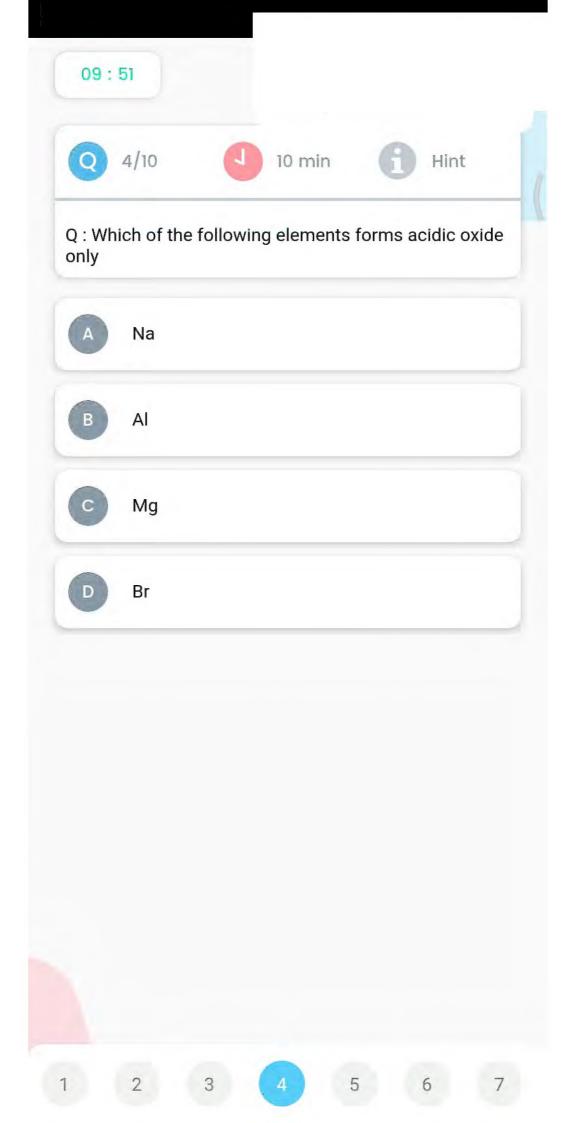
Atomic Size, Ionization Energy and Electron Affinity,
Melting and Boiling Point, Electrical Conductivity
+ Metallic and non-metallic character, Oxidation
States + Hydration Energy, Halides & Oxides

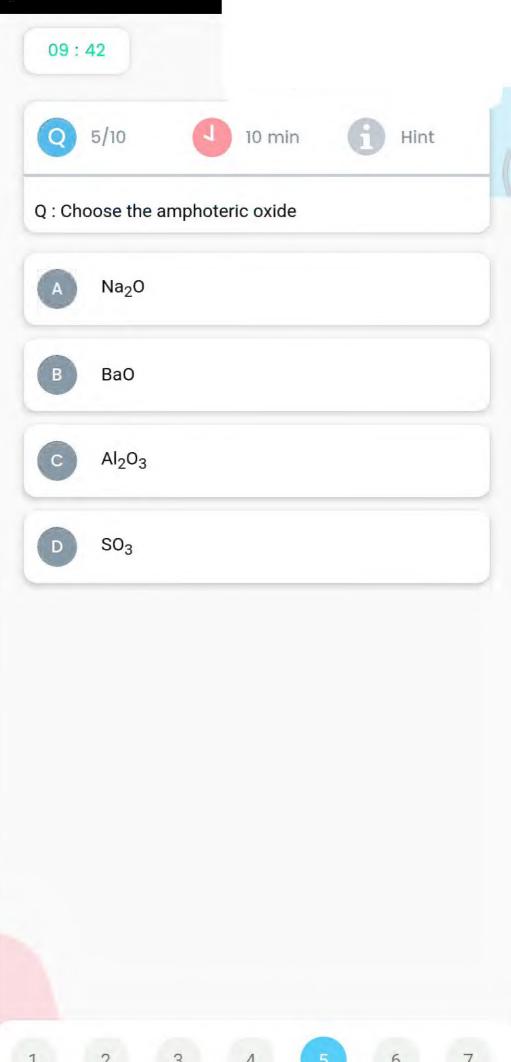
Start Test

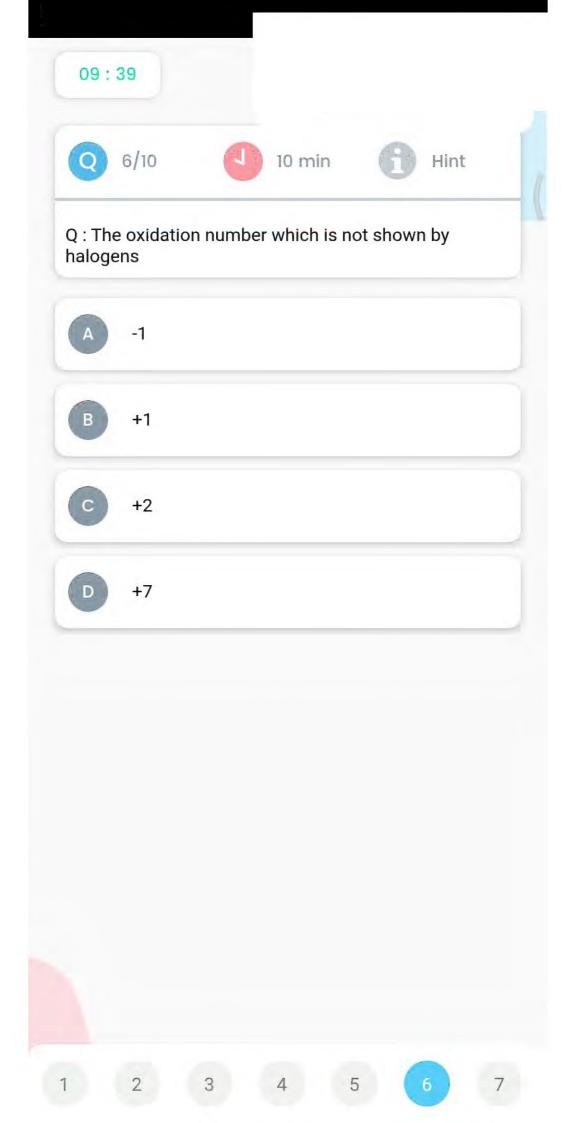


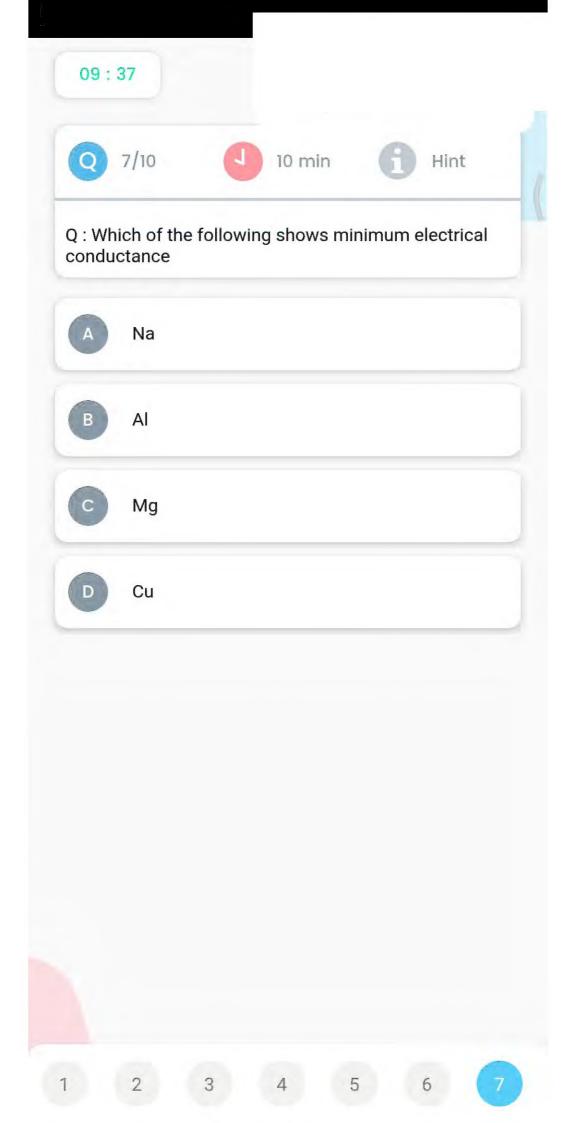


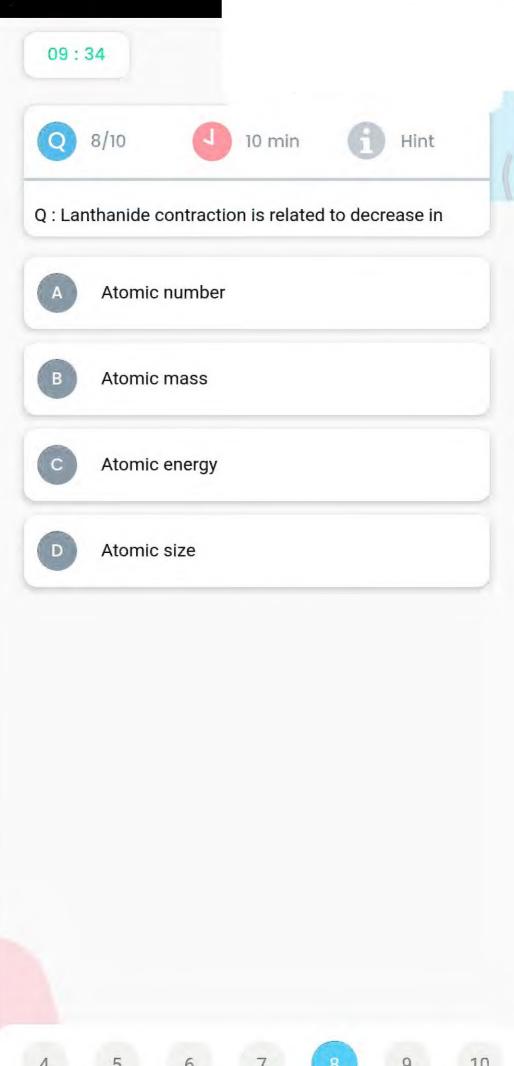












5 6 7 8

09:33

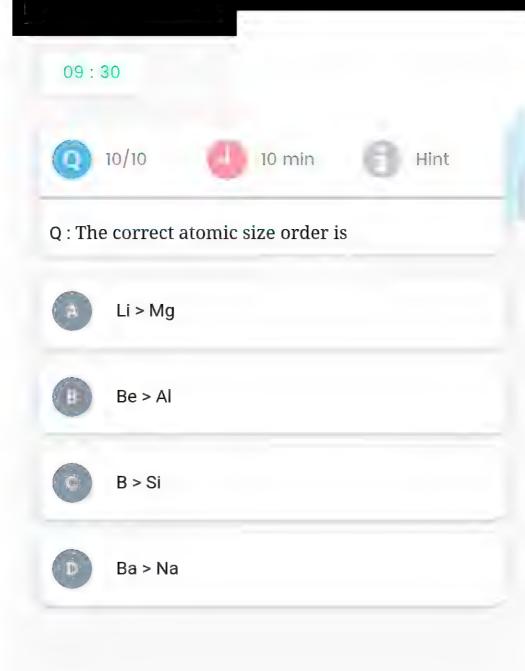




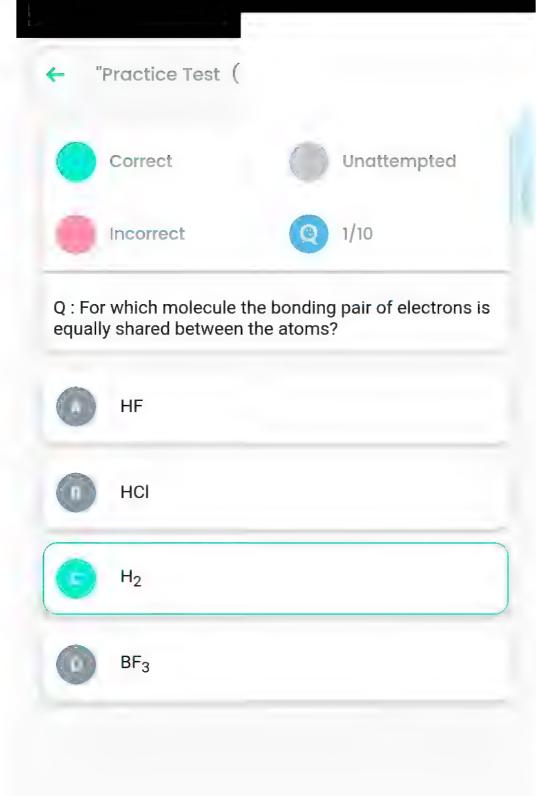


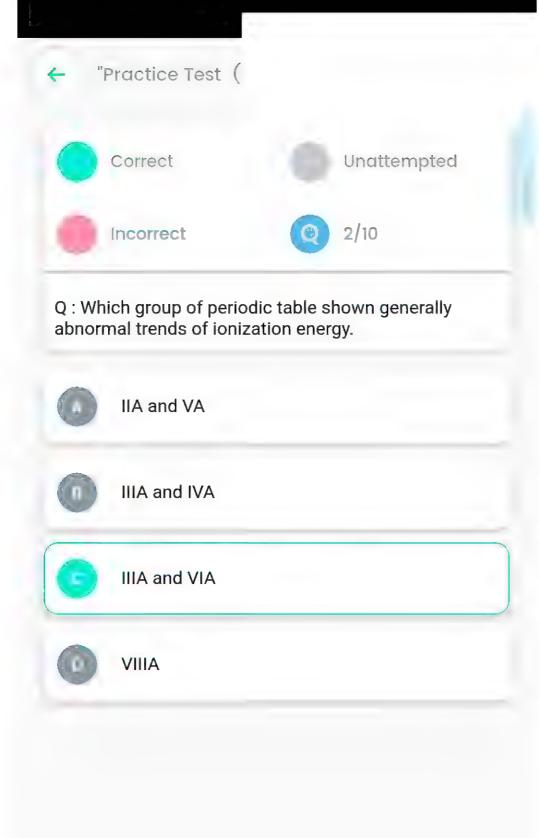
Q : The electronic configurations of some elements are given below. The element with highest electron affinity is

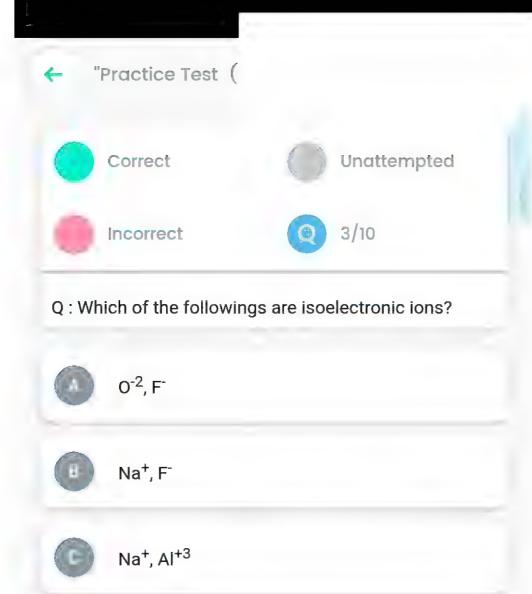
- $1s^2$, $2s^2$, $2p^6$, $3s^2$, $3p^5$
- $1s^2$, $2s^2$, $2p^6$, $3s^2$, $3p^1$
- ls^2 , $2s^2$, $2p^5$
- $1s^2$, $2s^2$, $2p^2$ D



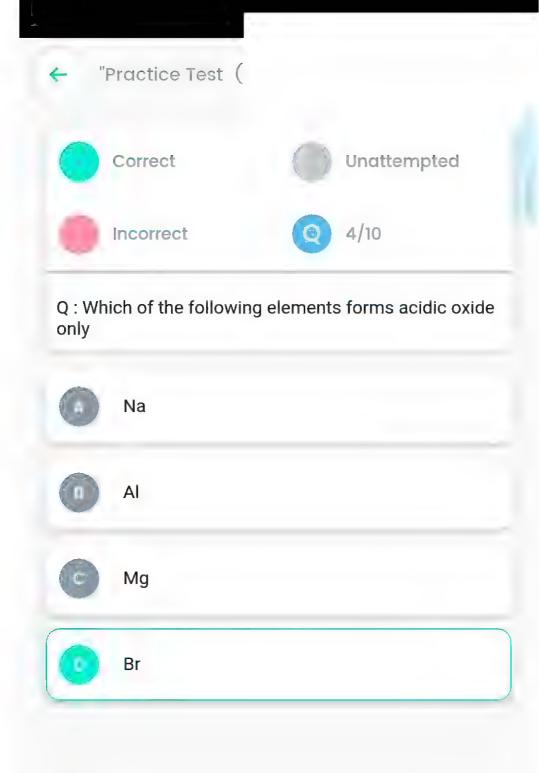
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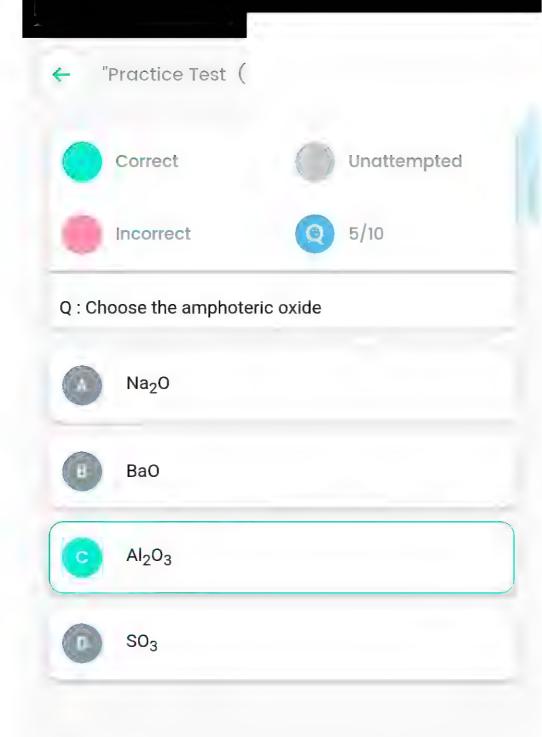


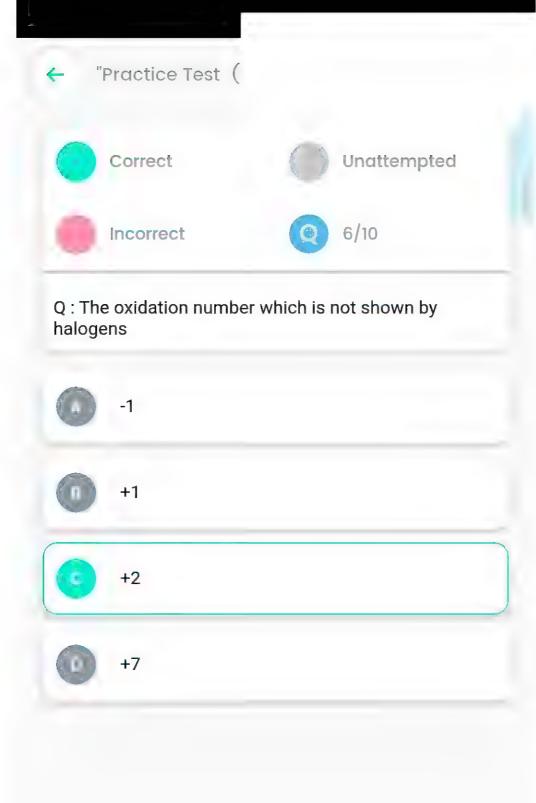


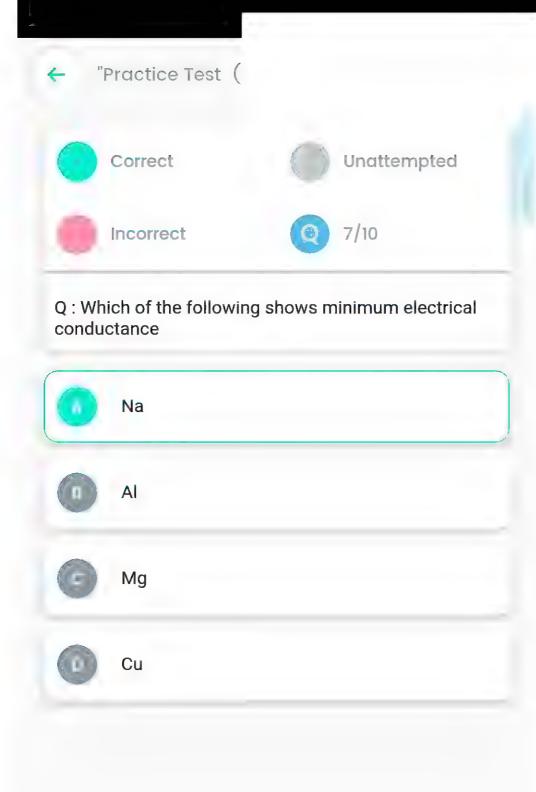


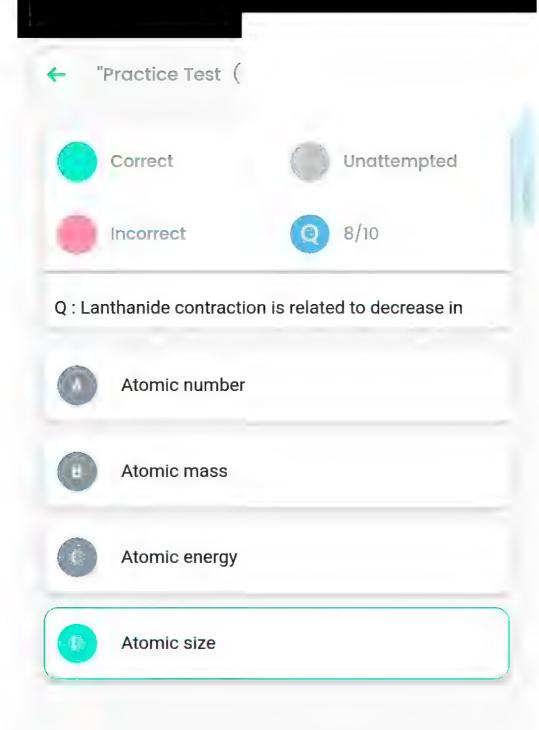
All of these

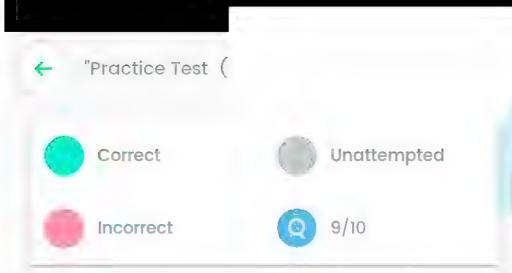








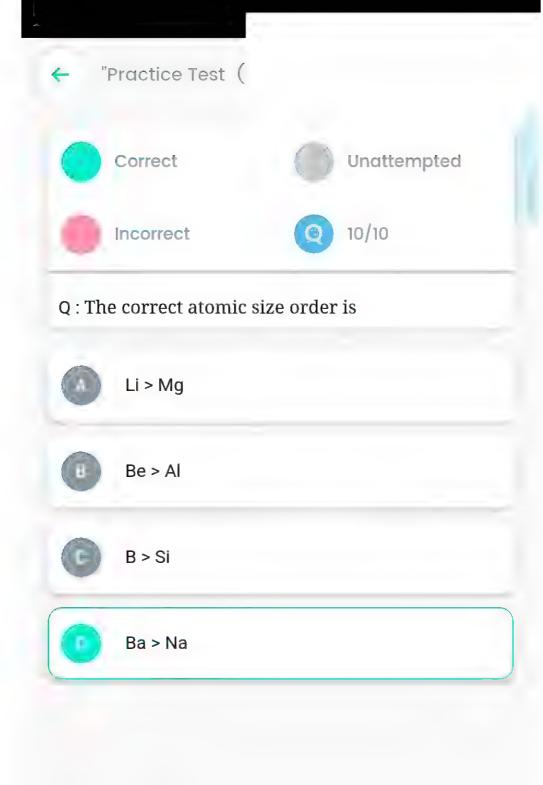




Q : The electronic configurations of some elements are given below. The element with highest electron affinity is

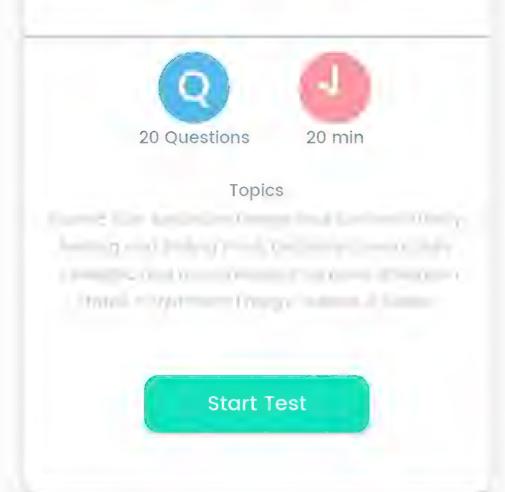


- 1s², 2s², 2p⁶, 3s², 3p¹
- Is², 2s², 2p⁵
- 1s², 2s², 2p²





Test Level-1 (1B-Periods)

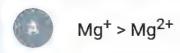




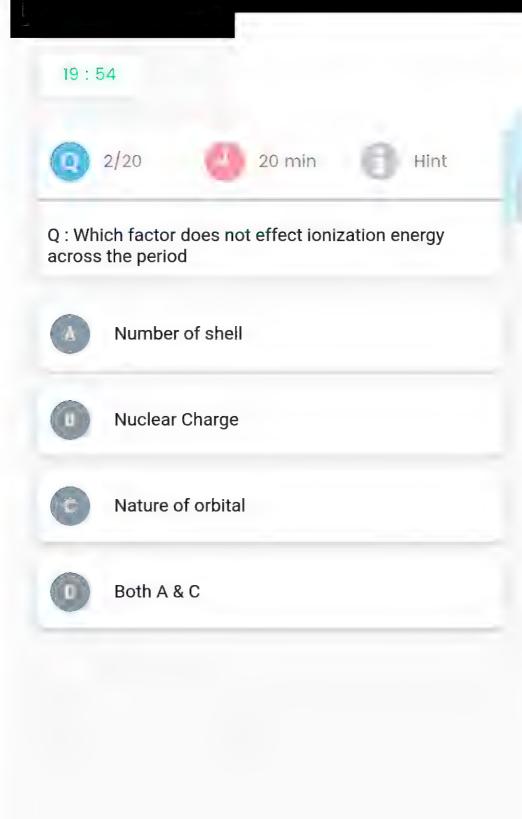




Q : Select the correct option according to size



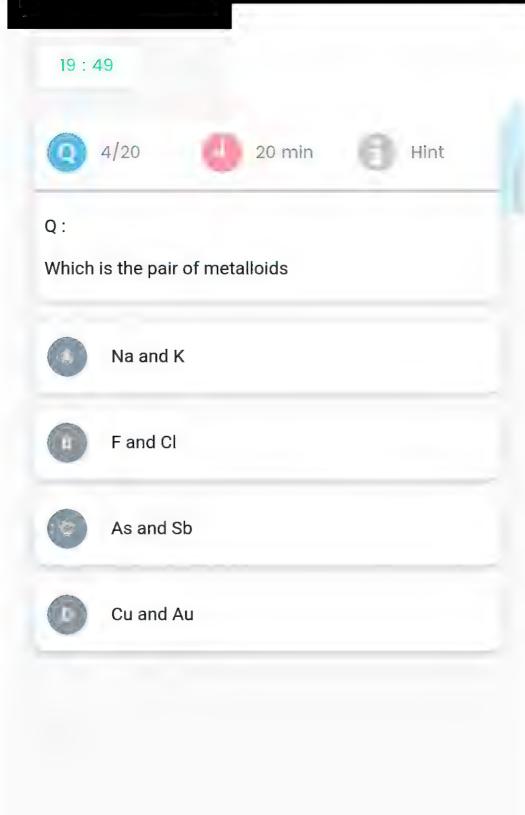




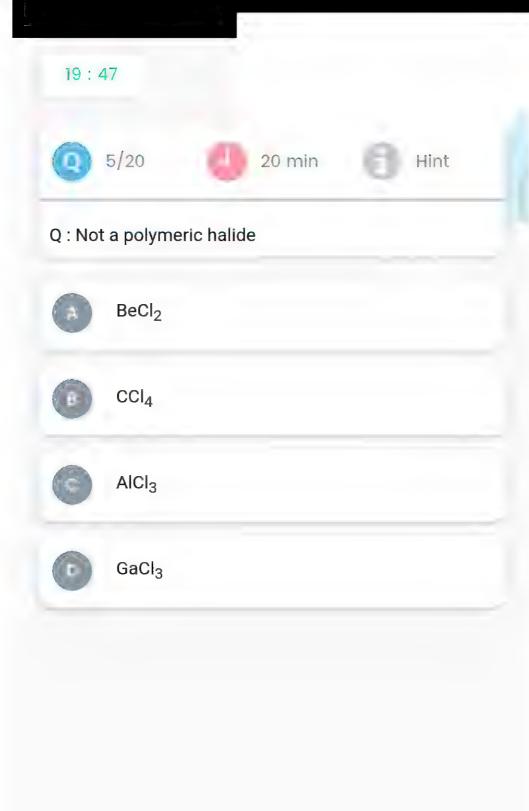
Metallic character decreases down the group

Metallic character remains the same down

the group



1 2 3 5 6







Q : Which of the following is correct order with respect to covalent nature







All are correct orders



7/20



20 min



Hint

Q : For elements of group VA, the oxidation state is equal to



The number of electrons present in the valance shell



The number of vacancies available in the valence shell



The number of all electrons present in all shells



Both A and B

1

2

ರ

4

E





20 min

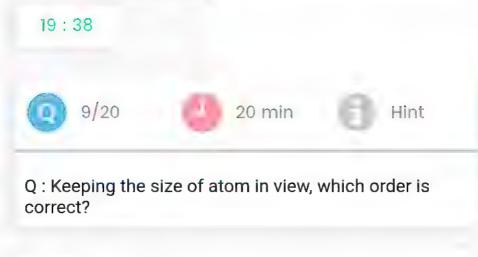


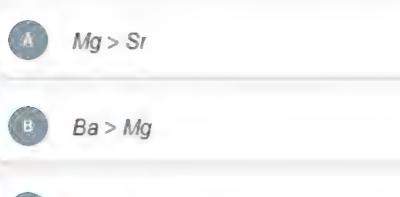
Hint

Q: Which of following is a correct order of degree of hydration in alkali metal ions

$$L_1^+ > Na^+ > K^+ > Rb^+ > Cs^+$$

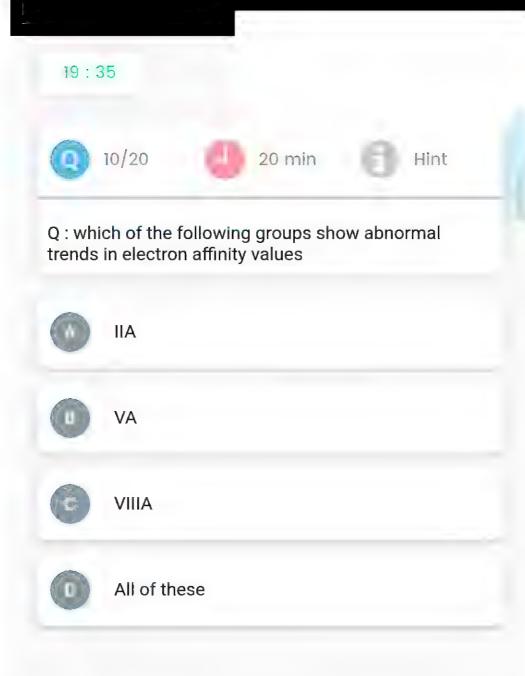




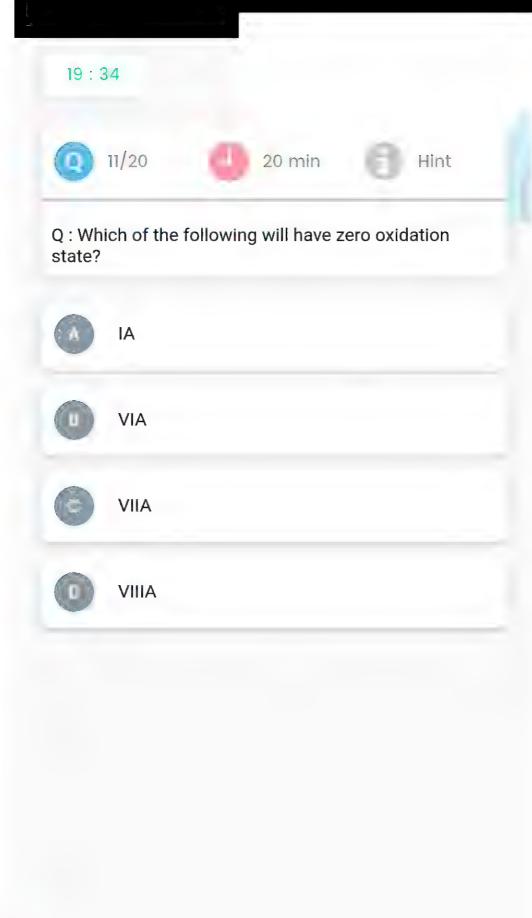


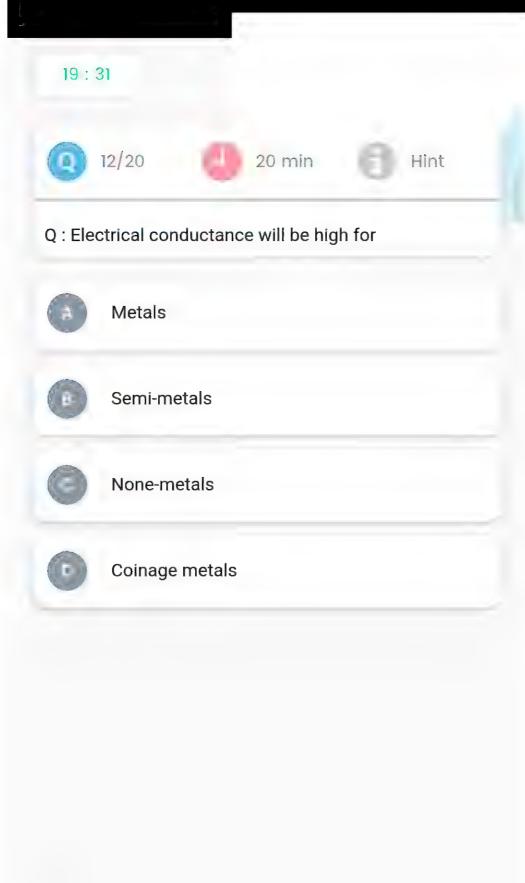


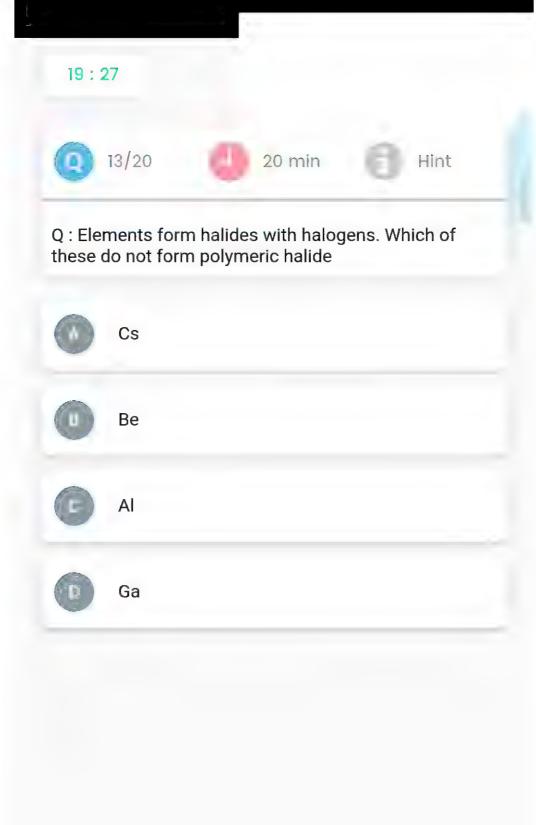




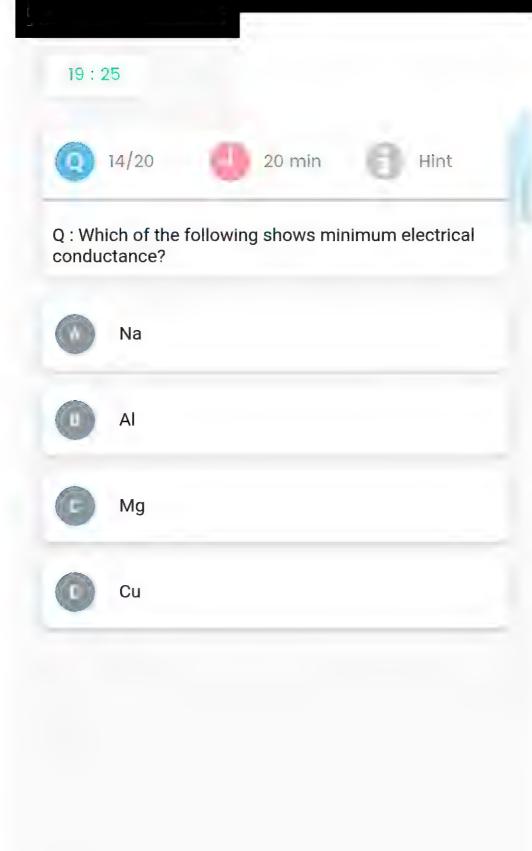
6 7 8 9 11 1



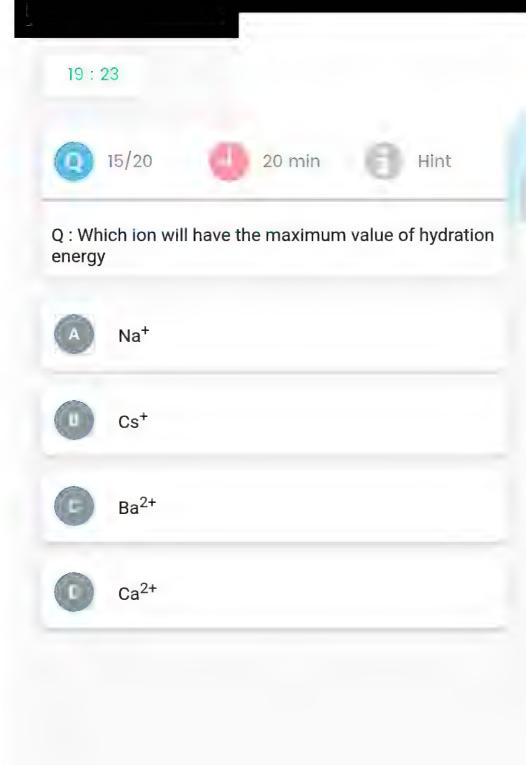




10 11 12 14 15 16



10 11 12 13 15 16 1



10 11 12 13 14 **16** 1





Q : The elements for which the value of electron affinity is high



- Gain electrons with difficulty
- Lose electrons less readily
- Lose electron readily

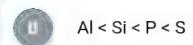
10 11 12 13 14 15

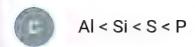




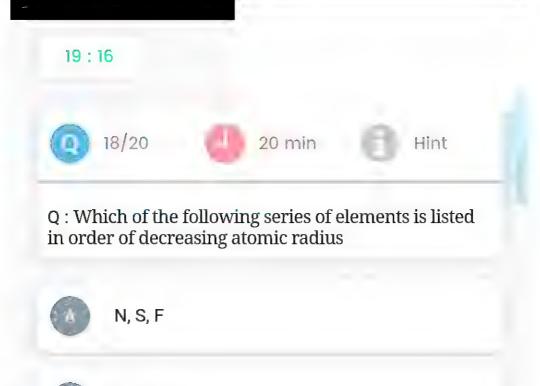
Q : The correct sequence of ionization energy of the elements is









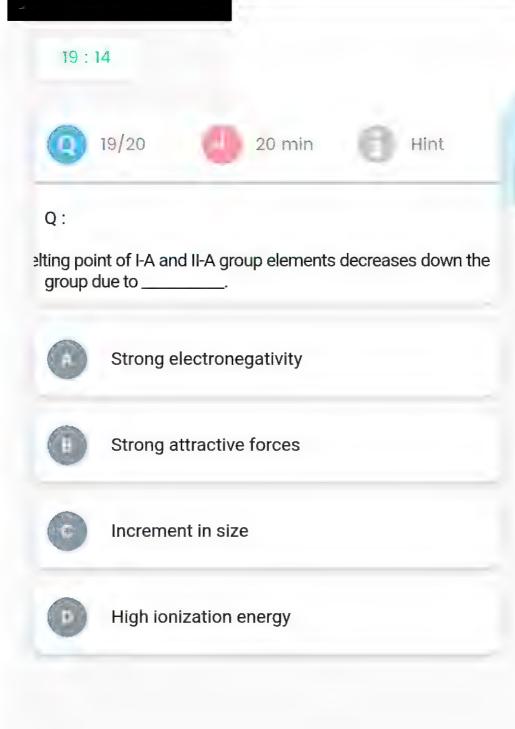




Li, Na, K

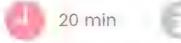


14 15 16 17 19 20



14 15 16 17 18 2







Hint

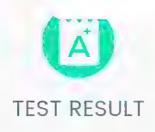
Q: Which of the following process is exothermic

$$O_{(g)}^{-1} + 1e^{-} \longrightarrow O_{(g)}^{-2}$$

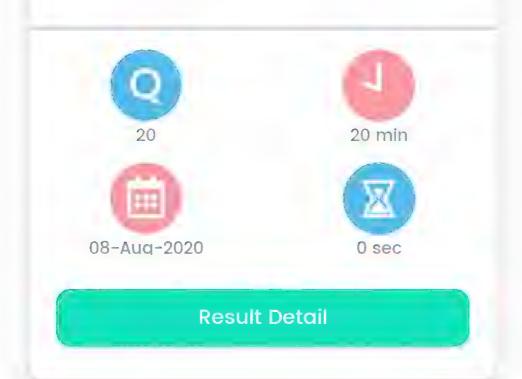
$$Cl_{(g)}^- \longrightarrow Cl_{(g)}^+ + le^-$$

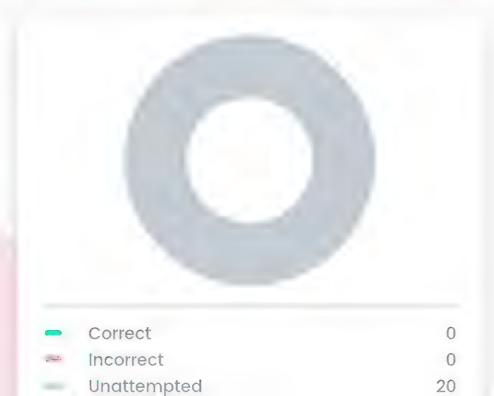
$$O_{(g)} + 1e^{-} \longrightarrow O_{(g)}^{-1}$$

$$H_{(g)} \longrightarrow H_{(g)}^+ + 1e^-$$



Test Level-1 (1B-Periods)



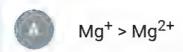


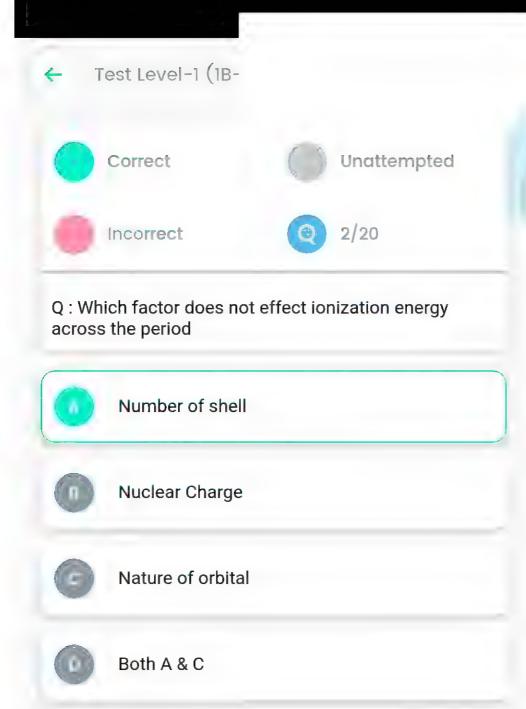


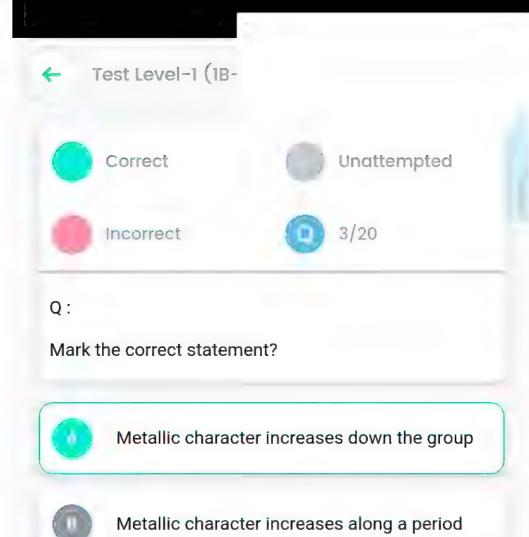




Q : Select the correct option according to size



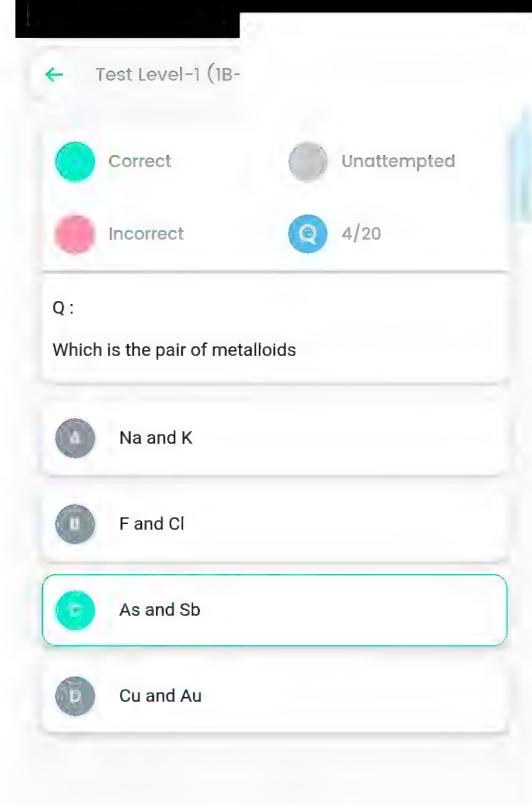


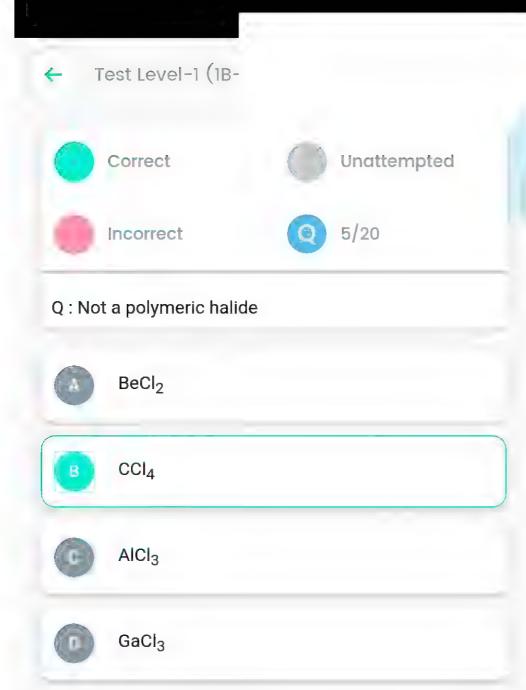


the group

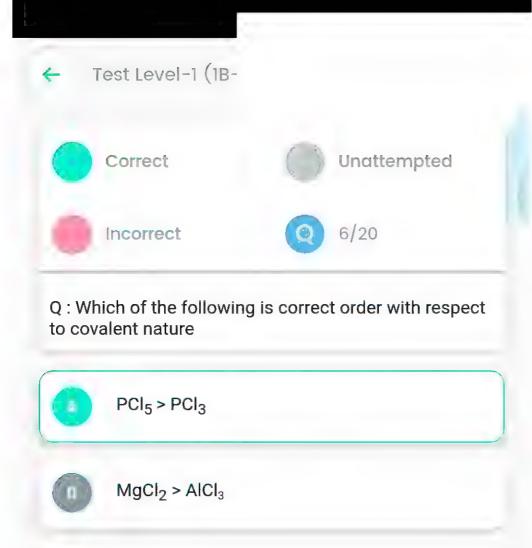
Metallic character decreases down the group

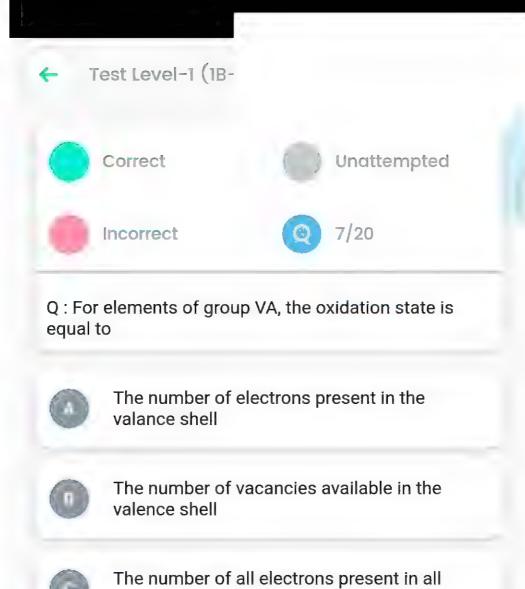
Metallic character remains the same down





1 2 3 4 5 6





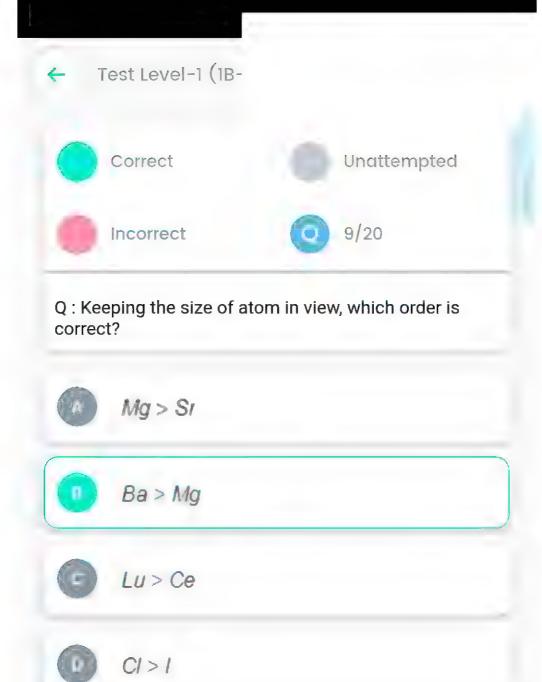
shells

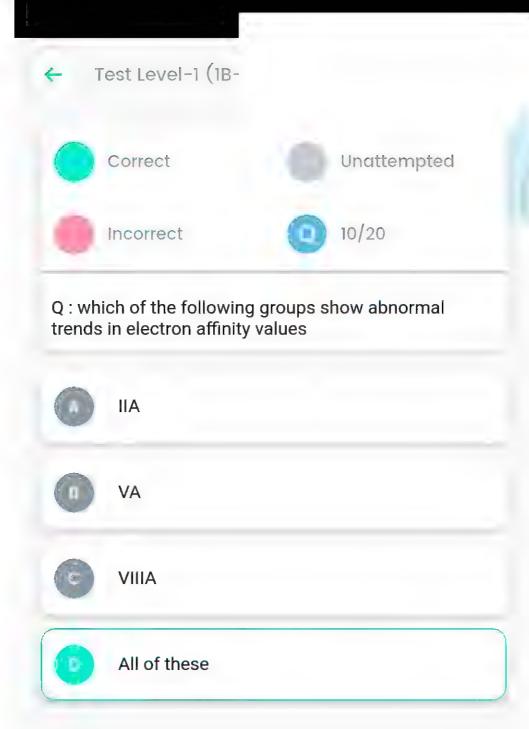
Both A and B

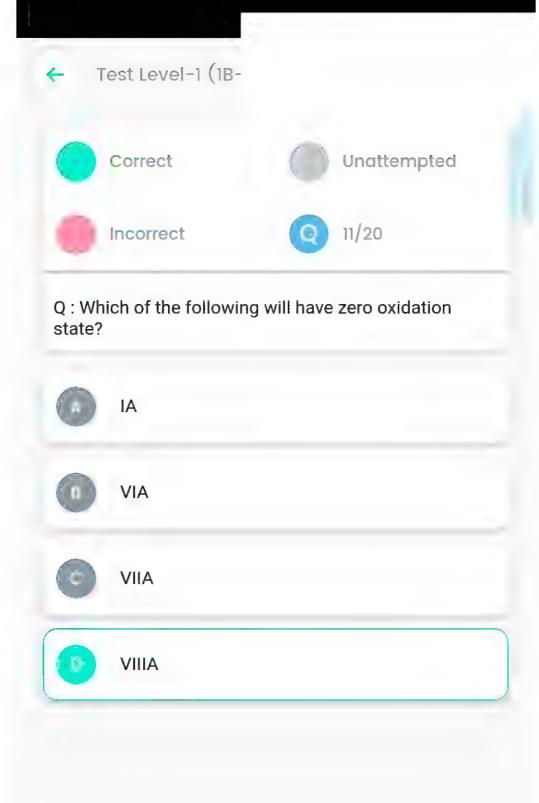




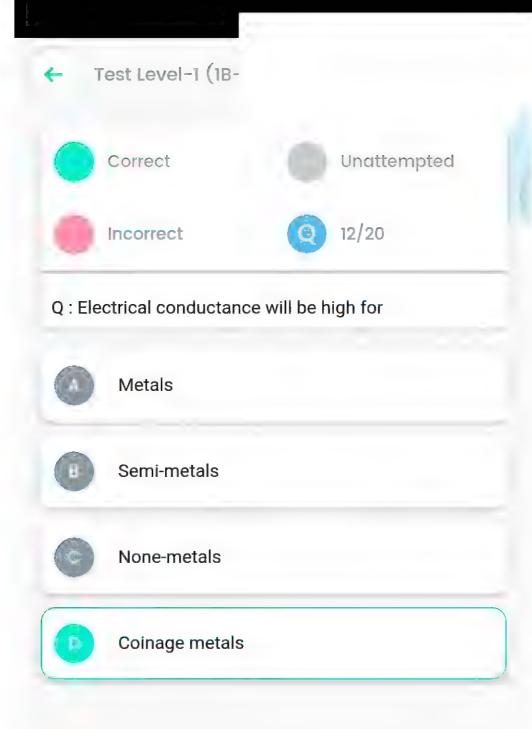
Q: Which of following is a correct order of degree of hydration in alkali metal ions



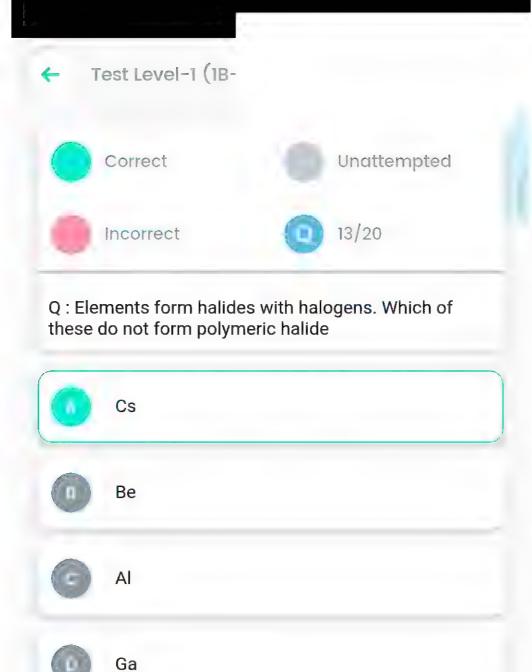


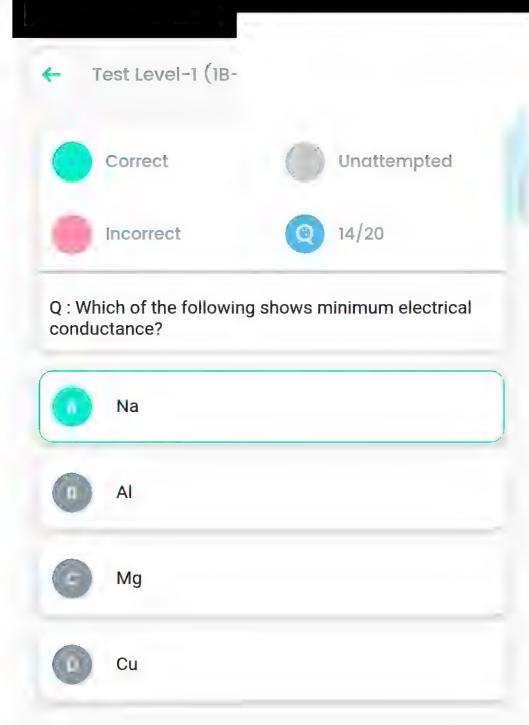


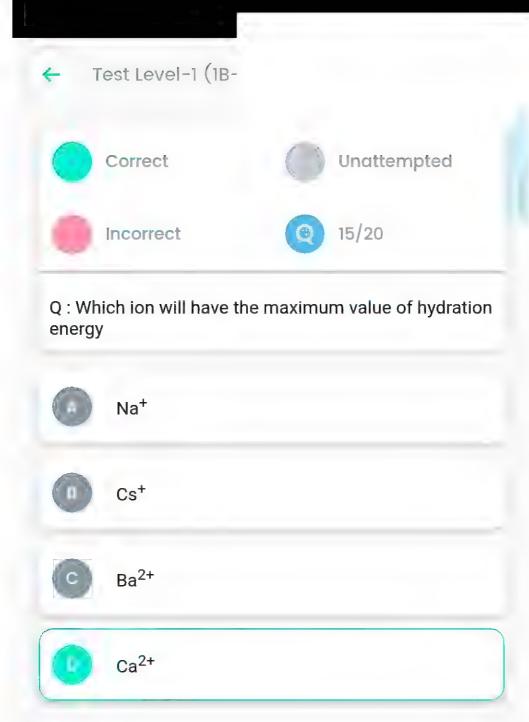
11 1 12 13 14 15 16 17

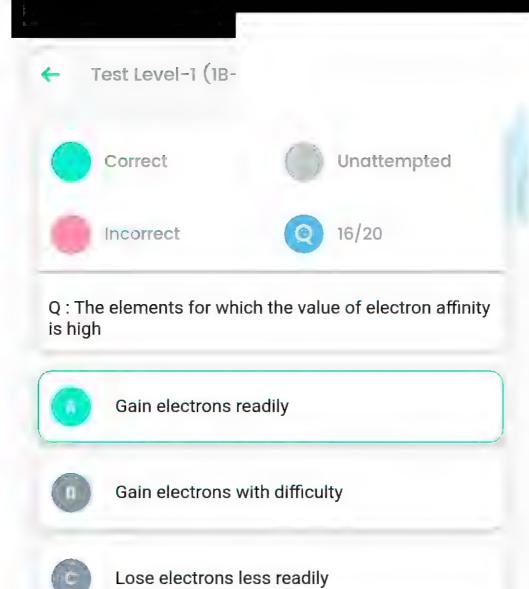


11 (12) 13 14 15 16 1

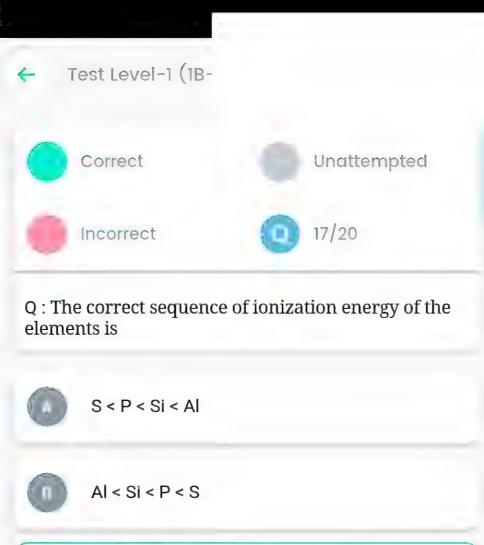


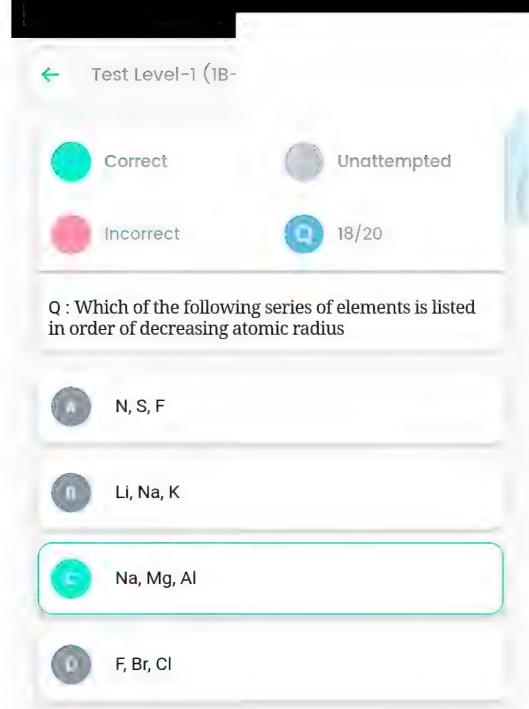


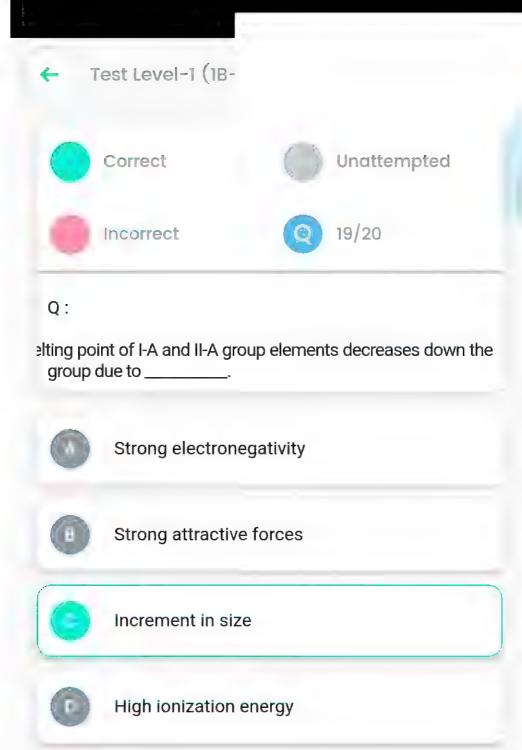




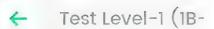
Lose electron readily







14 15 16 17 18 1 19 1 20





Q: Which of the following process is exothermic

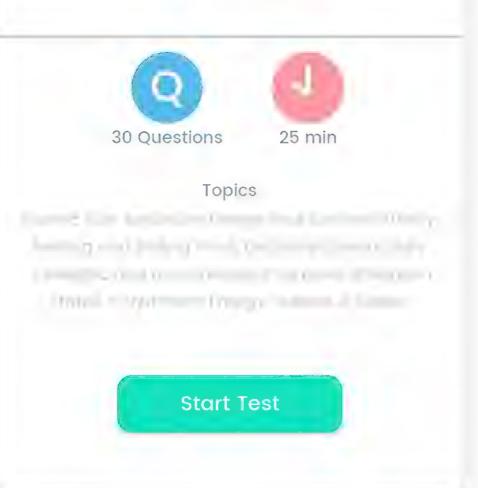
$$O_{(g)}^{-1} + 1e^{-} \longrightarrow O_{(g)}^{-2}$$

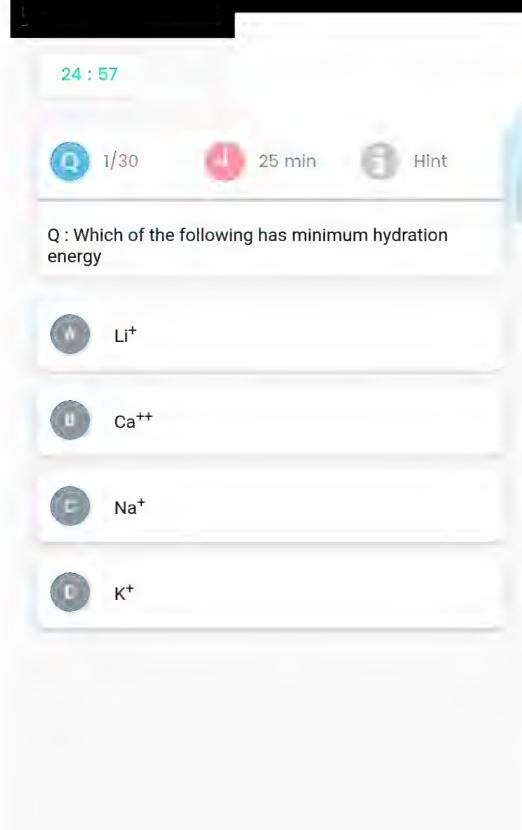
$$Cl_{(g)}^- \longrightarrow Cl_{(g)}^+ + le^-$$

$$O_{(g)} + 1e^- \longrightarrow O_{(g)}^{-1}$$



Test Level-2 (Topic 1B)





2 3 4 5 6





25 min



Hint

Q: Which of the following oxide is classified incorrectly



Na.O - Neutral



CO₂-Acidic



NO₂-Acidic



BeO-Amphoteric





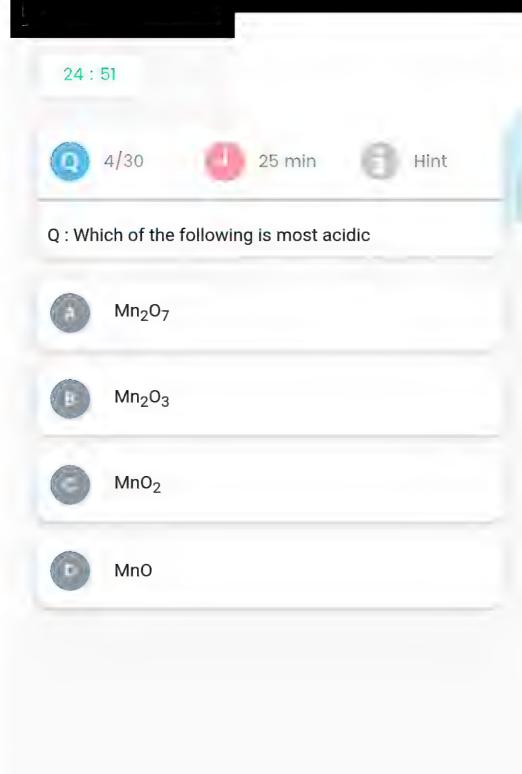
25 min

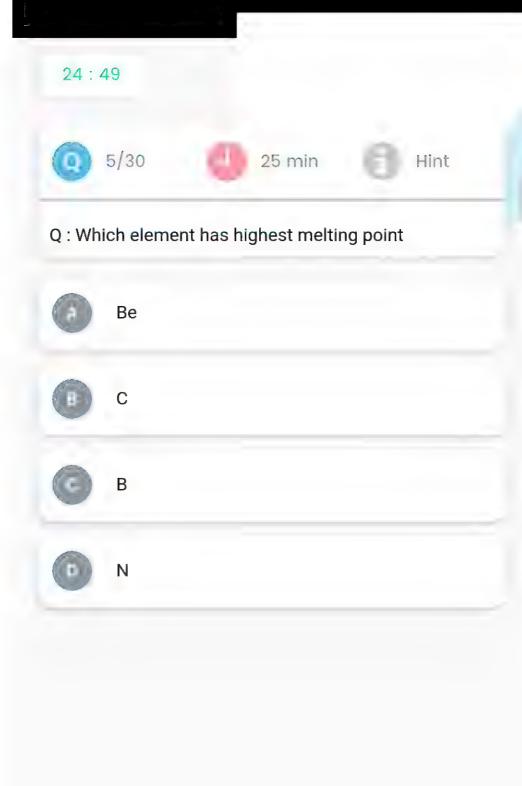


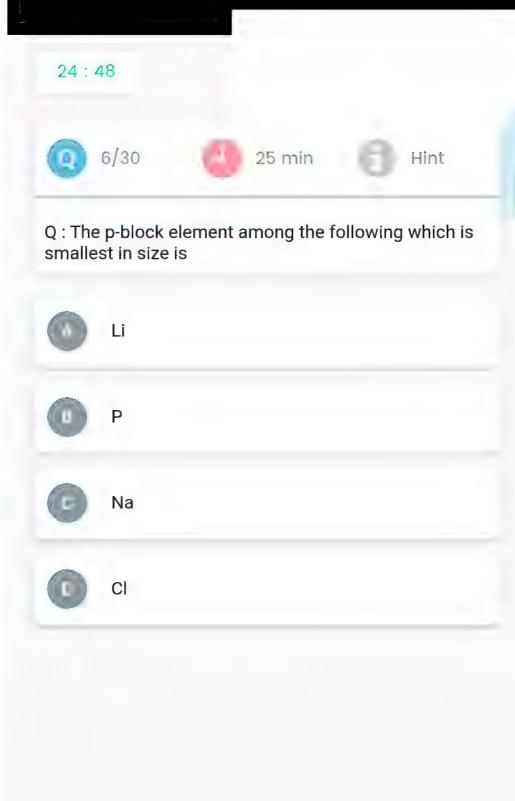
Hint

Q : Which of the following electronic configuration represents atoms of element having the highest 2nd lonization energy

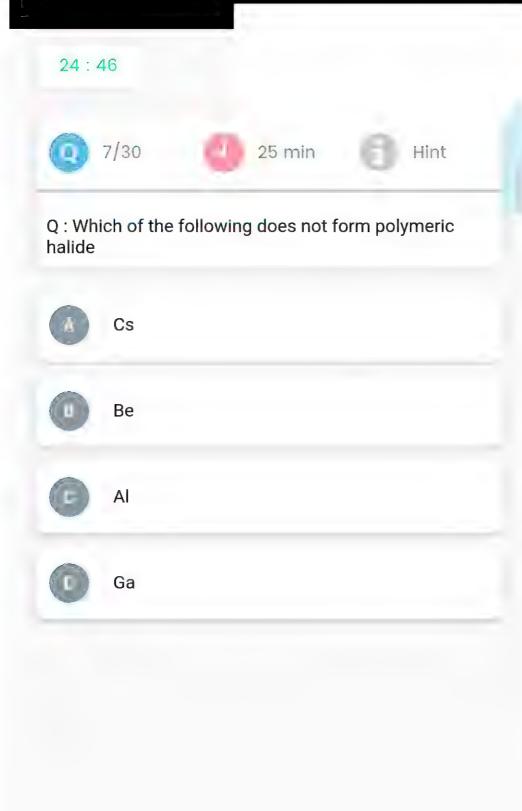
- 1s² 2s² 2p⁴
- 1s² 2s² 2p⁵
- $1s^2 2s^2 2p^6 3s^1$
- $1s^2 2s^2 2p^6 3s^2$





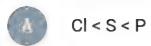


2 3 4 5



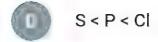


Q : The increasing order of the first ionization enthalpies of the elements P, S and Cl is

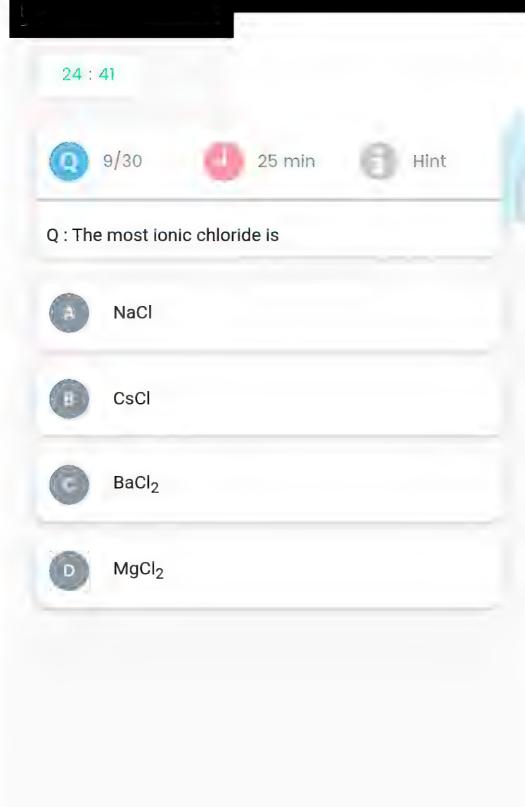


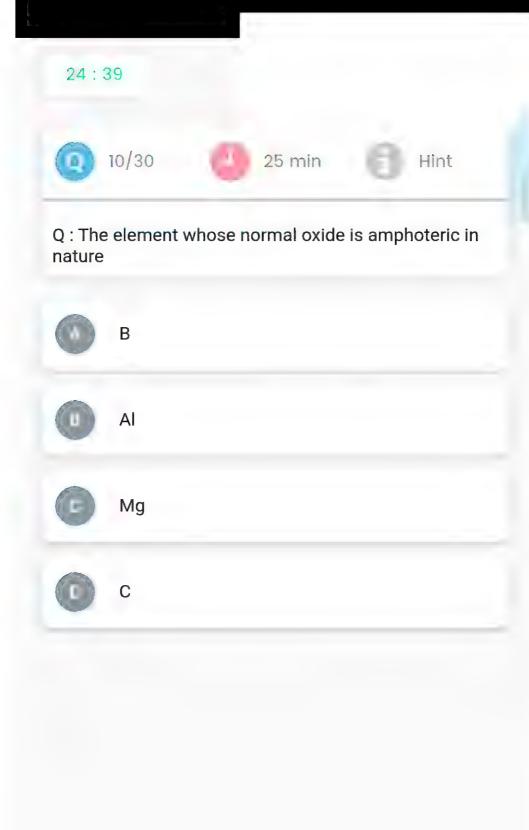






Hint

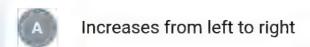




5 6 7 8 9 11



Q : The melting and boiling point along 2nd and 3rd period

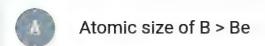


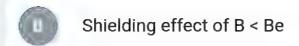
- Decrease from left to right
- 1st increases upto group IVA and then decreases
- 1st decreases upto group IV A and then increases

5 6 7 8 9 10

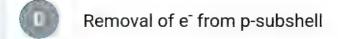


Q : The ionization energy of boron is less than that of beryllium because









9 10 11 13 14 15



13/30



25 min



Hint

Q : Which among the following is the correct order of increasing ionic radius



$$AI^{+3} < Na^{+1} < Mg^{+2}$$



$$AI^{+3} < Mg^{+2} < Na^{+1}$$

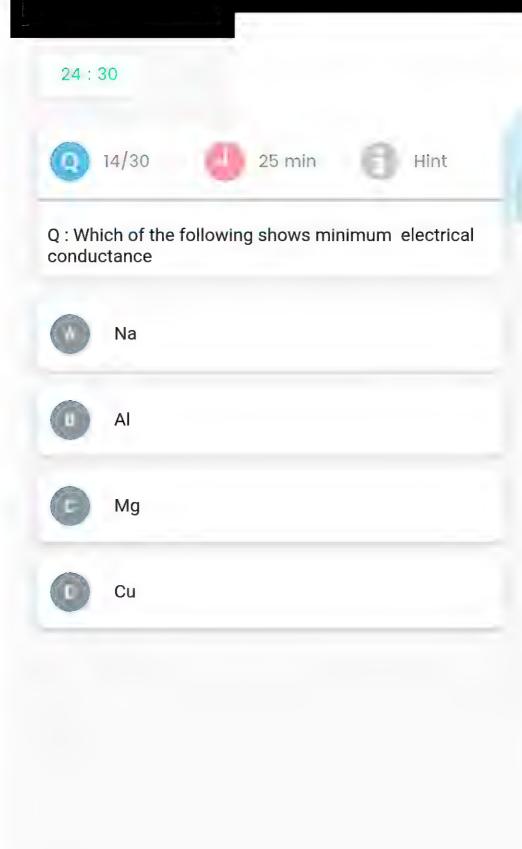


$$Na^+ < Mg^{+2} < Al^{+3}$$



$$Mg^{+2} < AI^{+3} < Na^{+1}$$

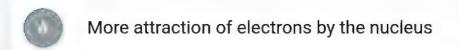
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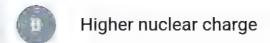


9 10 11 12 13 15



Q : The ionization energy of nitrogen is more than that of oxygen because of





- The extra stability of half-filled p orbitals
- The size of nitrogen atom is smaller

9 10 11 12 13 14



Q:

An atom has electronic configuration: $1s^2 \cdot 2s^2$, $2p^6$, $3s^2$, $3p^4$ You will place it in

- Group II A , Period 2
- Group VI A , Period 2
- Group II A , Period 3
- Group VI A , Period 3

1 12 13 14 15 17

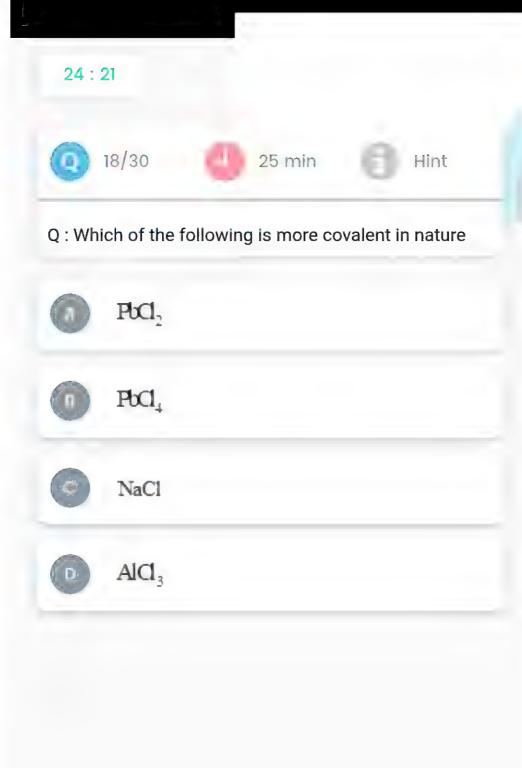


Q : One of the following factors that has no effect on the 1st ionization energy along the 2nd and 3rd periods

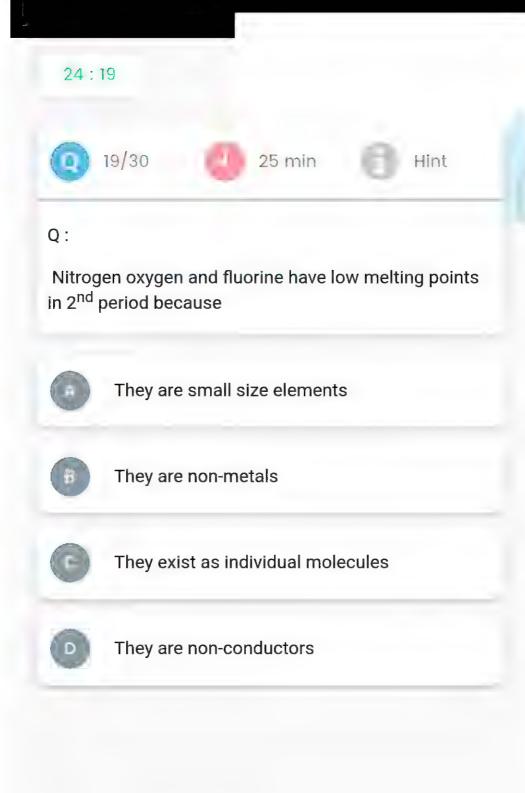


- Nuclear charge
- Half filled orbitals
- Completely filled orbitals

1 12 13 14 15 16 1



3 14 15 16 17 19 20



3 14 15 16 17 18 00 2



20/30



25 min



Hint

Q : Generally electronegativity of element in periods _____ and in groups _____



Increases, Increases



Increases, Decreases



Decreases, Decreases



Decreases, Increases

16

17

18

19

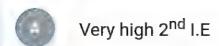
100

21

22



Q : Mg forms $\mathrm{Mg^{+2}}$ but does not form $\mathrm{Mg^{+3}}$ because of



- Very high 3rd I.E
- Very low 2nd I.E
- Very low 3rd I.E

16 17 18 19 20 22

24:13



Hint

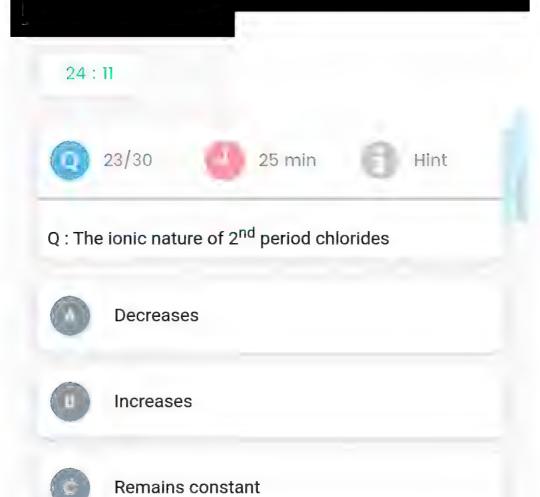
Q: The correct order of size is







 $Mg^{+2} > Mg$



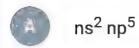
First increases and then decreases

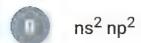
7 18 19 20 21 22 24



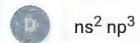
Q : Among the following outermost electronic configuration of the least electronegative element in a given period is

Hint

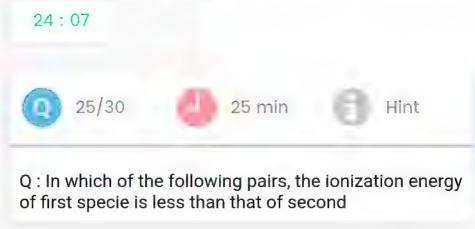








3 19 20 21 22 23







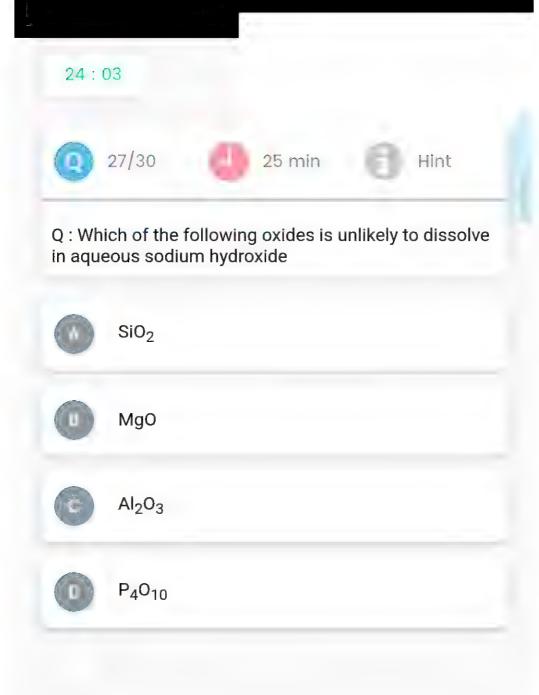
Q : The ionic radii (A^0) of N^{3-} , O^{2-} and F^- are respectively

- 1.36,1.40 and 1.71
- 1.36, 1.71 and 1.40
- 1.71, 1.40 and 1.36
- 1.71, 1.36 and 1.40

21 22



Hint



21 22 23 24 25 26



Q : Heat of hydration of gaseous hydrogen ion when it dissolved in water to make infinitely dilute solution is

Hint



- -1280kJmole⁻¹
- -1175kJmole⁻¹
- -965kJmole⁻¹



Q:

- Increase of charge on metal ions
- Increase in numbers of delocalized electrons
- Increase in the strength of the metallic bonding
- All of these

24





Q : Sum of number of all elements belonging to 2^{nd} and 3^{rd} periods collectively are

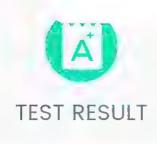




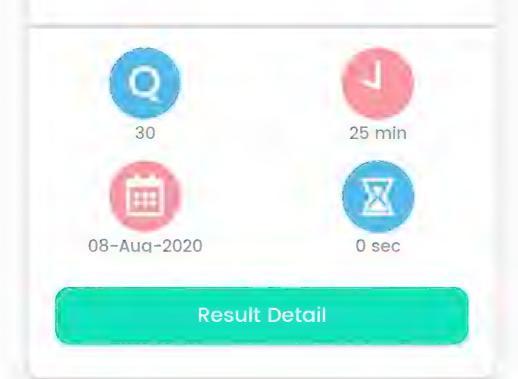


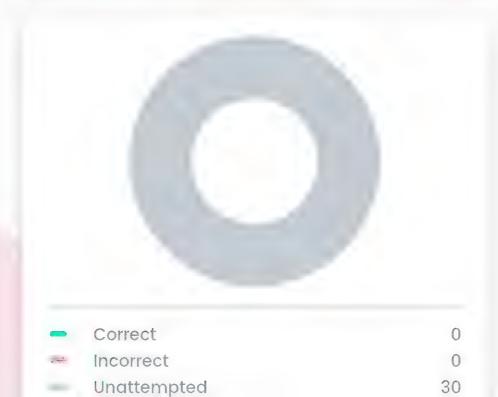


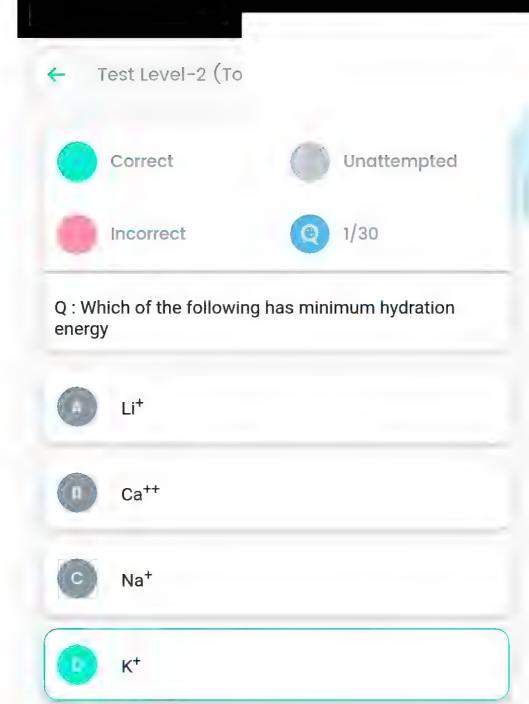
4 25

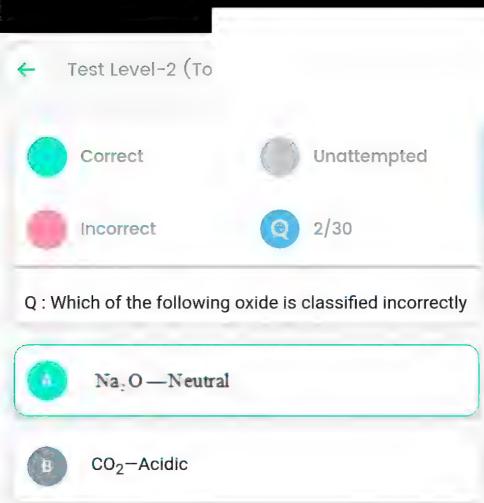


Test Level-2 (Topic IB)













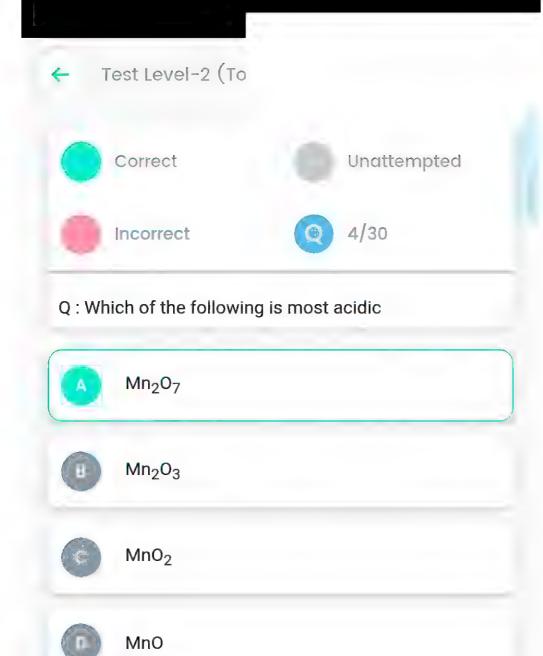
Q : Which of the following electronic configuration represents atoms of element having the highest 2nd lonization energy

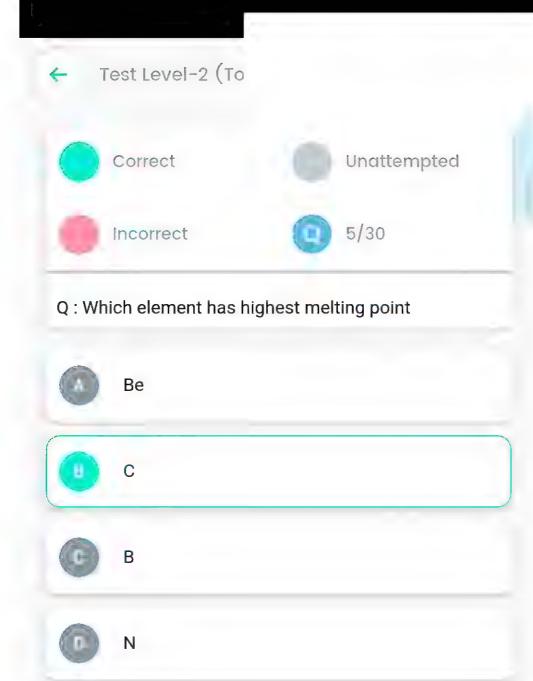


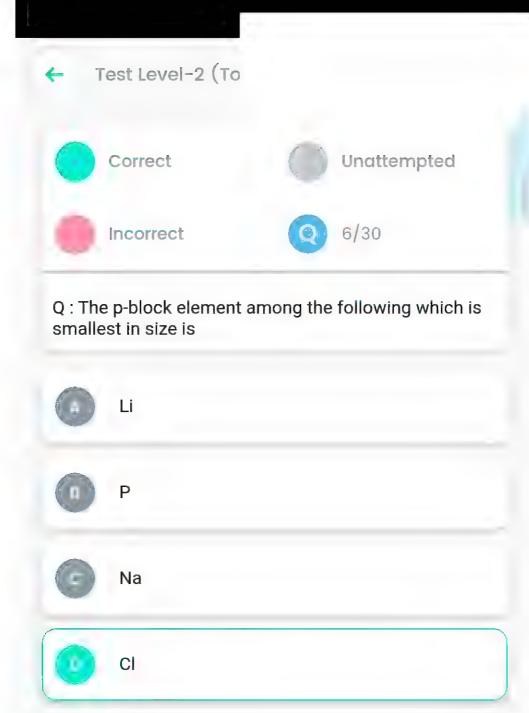


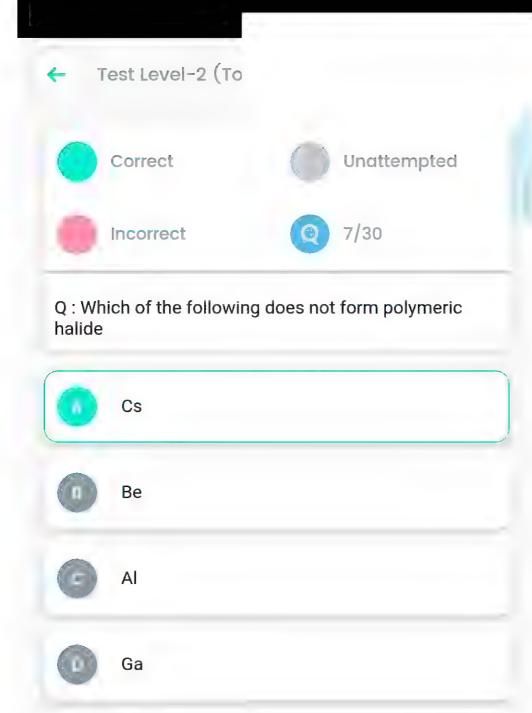


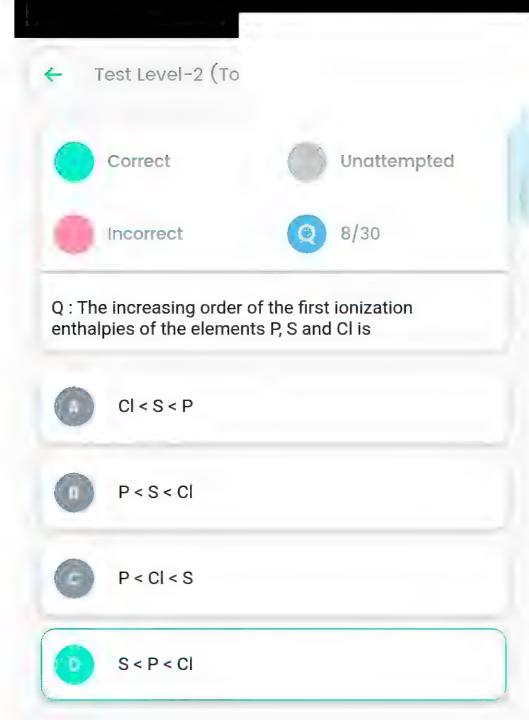
1s² 2s² 2p⁶ 3s²

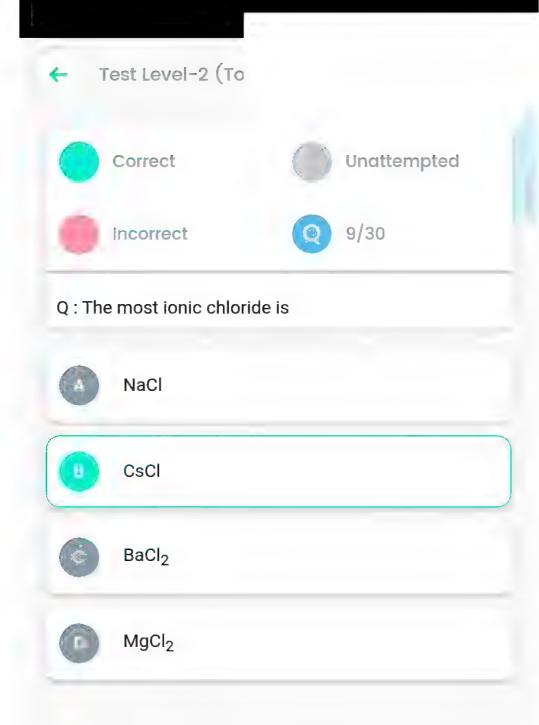




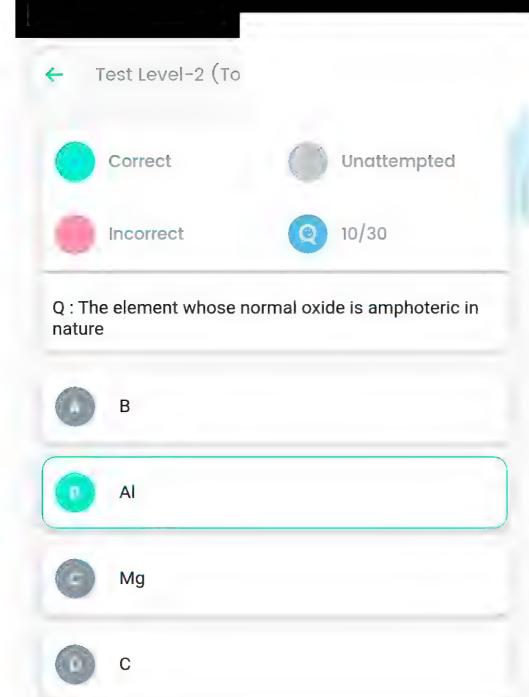




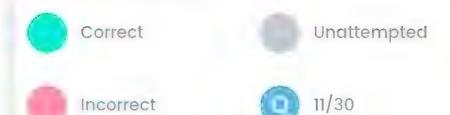




8 (9) 10 11 12 13 14

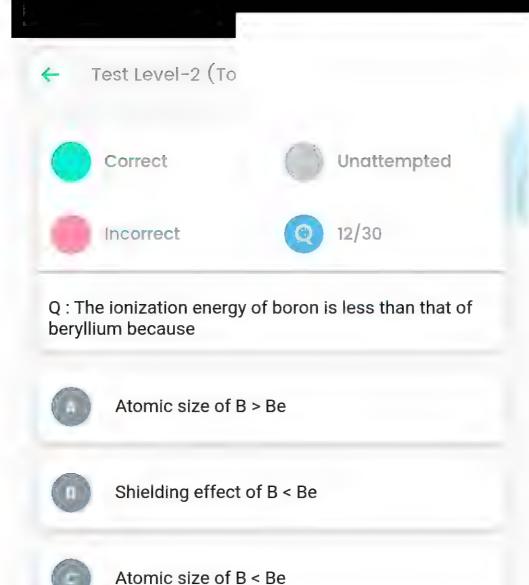






Q : The melting and boiling point along 2nd and 3rd period

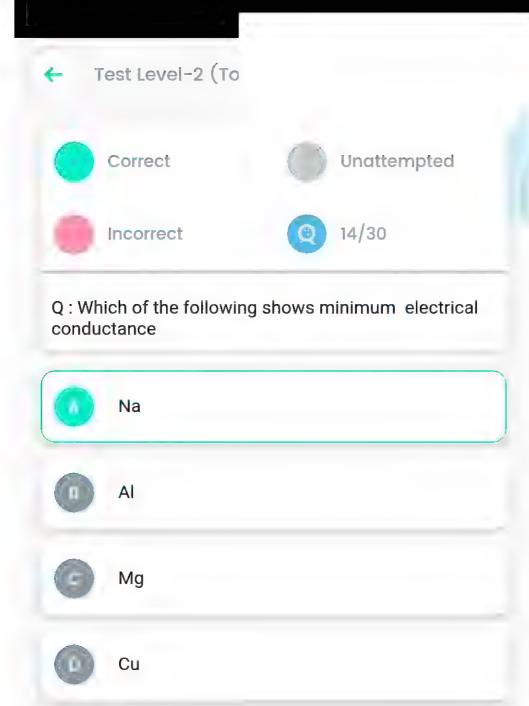
- Increases from left to right
- Decrease from left to right
- 1st increases upto group IVA and then decreases
- 1st decreases upto group IV A and then increases

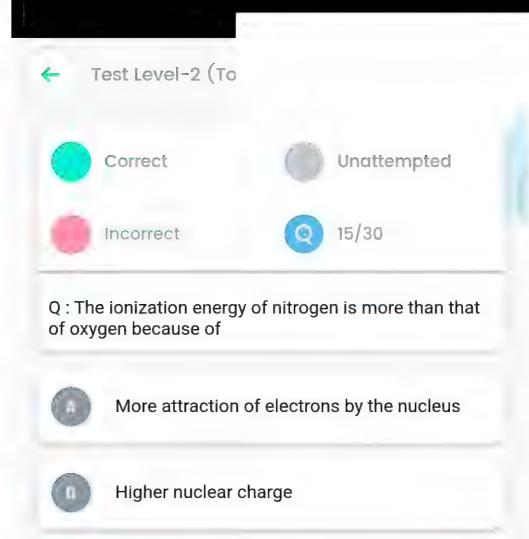




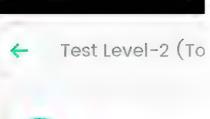


Q: Which among the following is the correct order of increasing ionic radius





- The extra stability of half-filled p orbitals
- The size of nitrogen atom is smaller

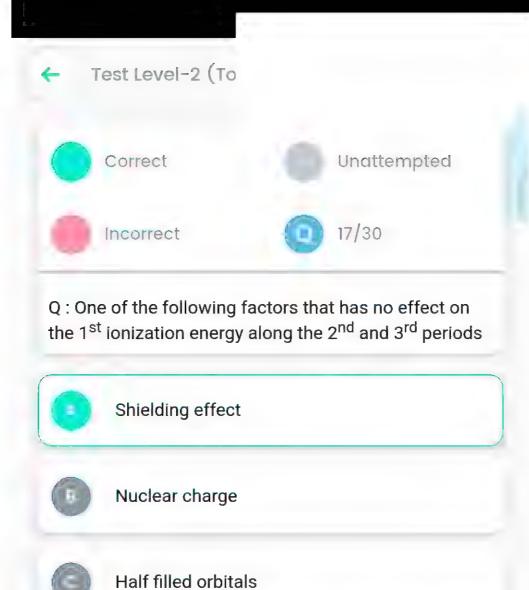




Q:

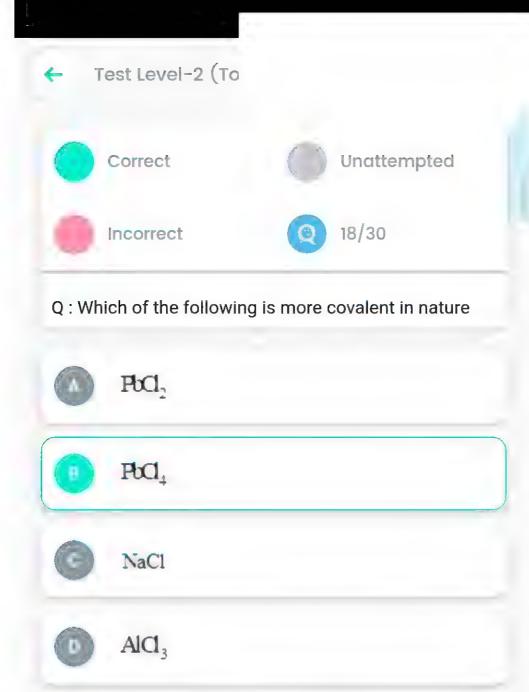
An atom has electronic configuration: $1s^2$, $2s^2$, $2p^6$, $3s^2$, $3p^4$ You will place it in

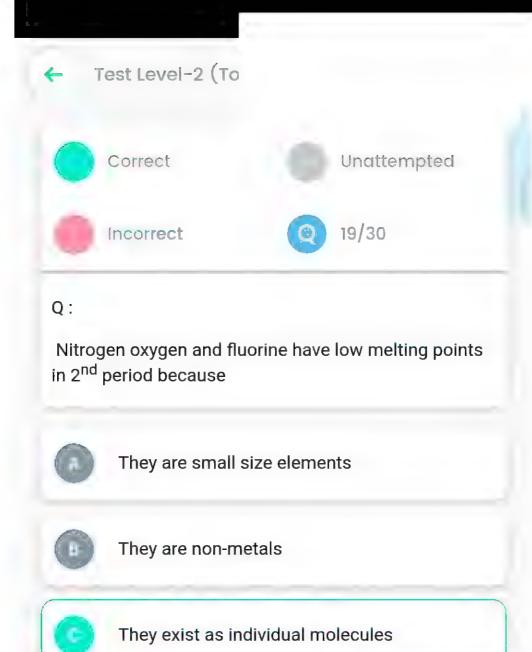
- Group II A , Period 2
- Group VI A , Period 2
- Group II A , Period 3
- Group VI A , Period 3

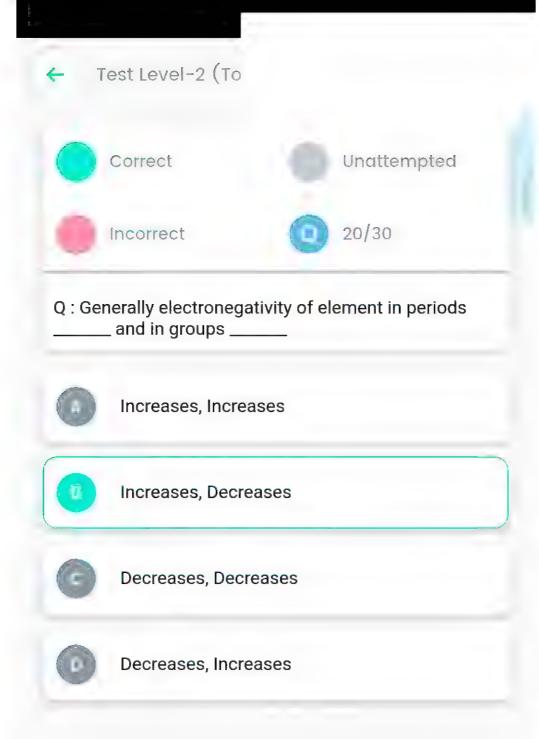


Completely filled orbitals

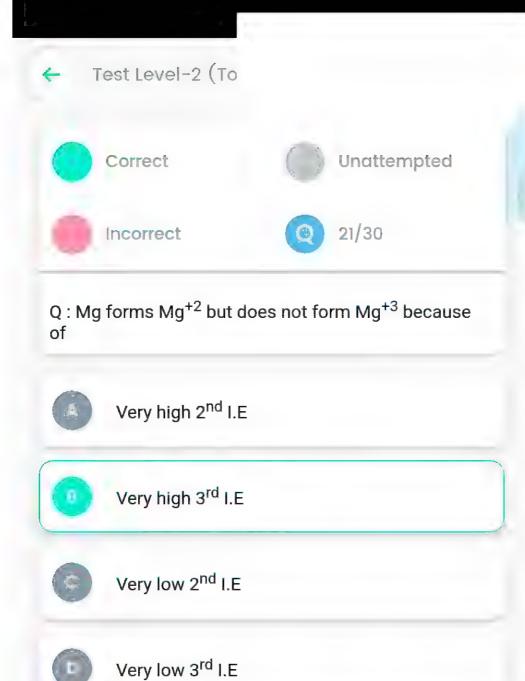
[17]



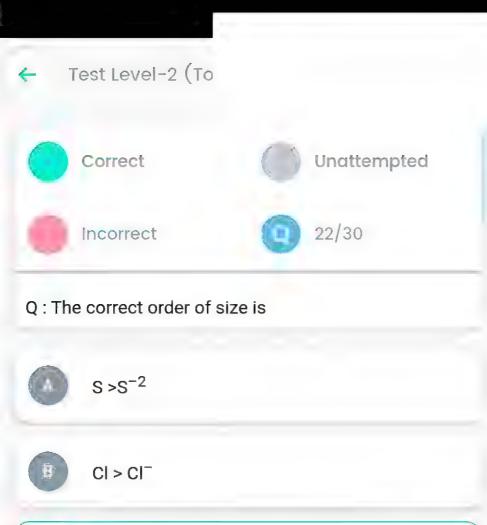




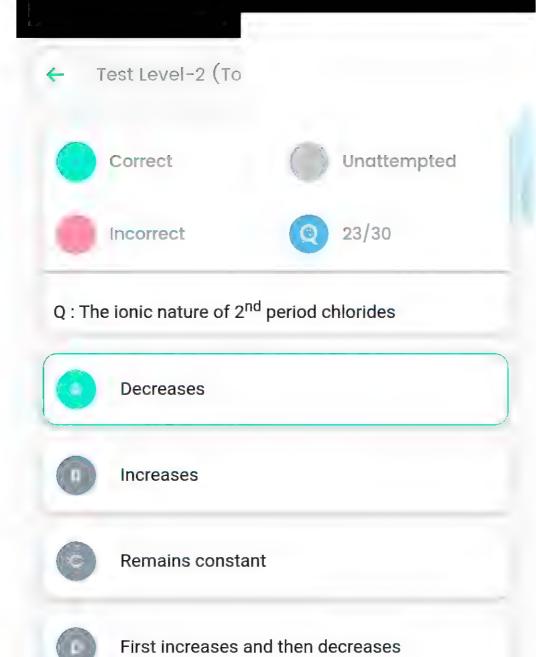
14 15 16 17 18 19 (20



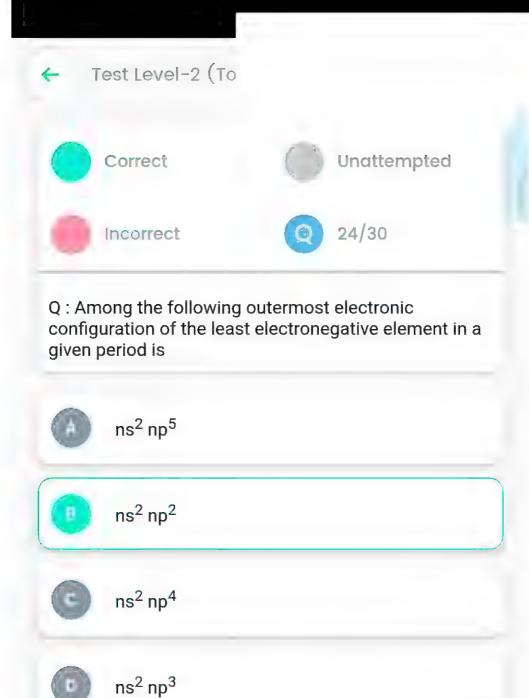
20 [21] 22 23 24 25 26



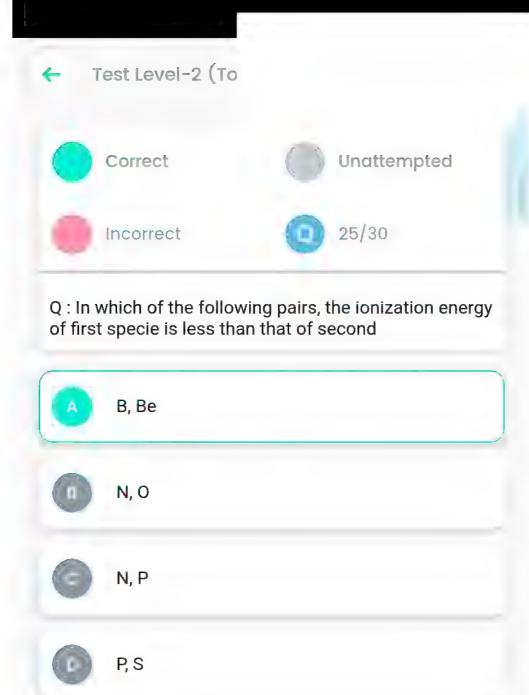
$$Mg^{+2} > Mg$$



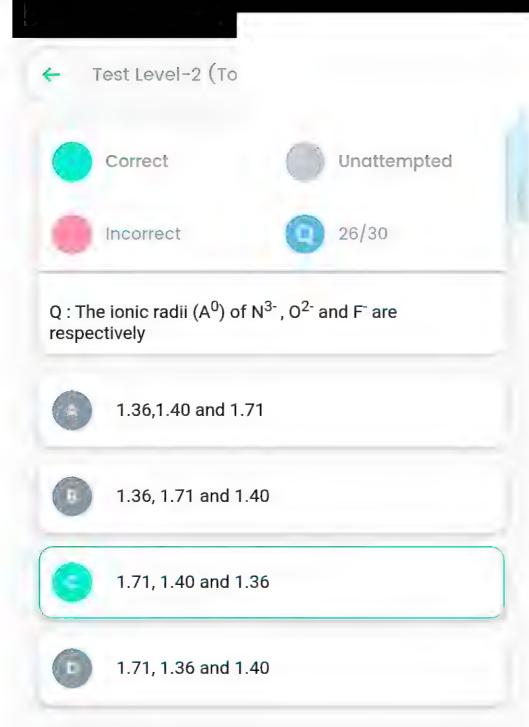
20 21 22 (23) 24 25 26



20 21 22 23 (24) 25 26



20 21 22 23 24 [25] 26



20 21 22 23 24 25 26

